

## APPLICATION

### Study field "Health Care" for assessment

Study field	<i>Health Care</i>
Title of the higher education institution	<i>Rīgas Stradiņa universitāte</i>
Registration code	<i>3341702042</i>
Legal address	<i>DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007</i>
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# **Self-evaluation report**

Study field "Health Care"

Rīga Stradiņš University

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# 1. Information on the Higher Education Institution/College

## 1.1. Basic information on the higher education institution/ college and its strategic development fields,.

Rīga Stradiņš University (RSU, information [in Latvian](#), [in English](#)) is a state-established higher education and research institution under the supervision of the Ministry of Health of the Republic of Latvia and has been closely integrated into the national healthcare system already since 1950. On 15 April 2002, RSU was registered with the Register of Higher Education Institutions, registration No 3341702042. It was accredited on 13 December 2001. RSU is the third largest higher education institution in Latvia with a pronounced international orientation - about 25% of all RSU students are international students. RSU's registered office is Dzirciema iela 16, Riga, but RSU study programmes are implemented also at other addresses. For example, RSU has one branch at Rīnķu iela 24/26, Liepāja, which is fully suitable for the work of the university. Lecture auditoriums and rooms are equipped with modern equipment, ensuring high-quality study process, including online lectures

RSU is one of the best higher education institutions in Latvia, as evidenced, for example, by various international university rankings. RSU ranks highest among all higher education institutions of Latvia in the *Times Higher Education (THE) World University Rankings* (being between 501-600). RSU health studies are highly ranked in the *THE Clinical and Health Ranking*, where RSU is ranked between 401-500th in the world. The highest score was obtained in the international perspective indicator (80.2 points), which allowed RSU to take the leading position among all the universities in the Baltic States in this category. In the *QS World Universities 2022* ranking, RSU is ranked 801st-1000th in the world, the second-best ranking among higher education institutions of Latvia. Comparative Approaches to Higher Education *U-Multirank 2022* ranking, RSU has received a total of 12 top (A) and nine top (B) ratings, while in the *U-Multirank World University Ranking 2021-2022 by Subject*, RSU has received a total of nine top (A) ratings, as well as a nomination in the *Innovative forms of assessment* category and is ranked in the top 25 universities in the world. RSU has also been highly ranked in the international ranking of academic and research institutions *SCImago Institutions Rankings 2022*, where it is ranked 1st in Latvia and 641st in the world (35 places higher than in 2021).

RSU has been recognised as the highest-quality higher education institution with the best reputation in Latvia for six years in a row in the *Kantar TNS* higher education reputation survey. Consistently the highest rating among the inhabitants of Latvia is on the value of RSU diploma, and in 2022 the evaluation of both the ability of the university to provide students with the knowledge and skills needed in the labour market and the scientific activity of the university increased.

The **vision** of RSU is to be the leading science and research university in Europe, a hub of talent and a place of excellence in research and practice-based education and experience. The **mission** of RSU is to ensure creation, accumulation and transfer of knowledge valued by the international scientific community and to offer excellent, inclusive and sustainable educational opportunities in the fields of health, life and social sciences in order to fulfil the lifelong potential of everyone.

RSU implements 10 study directions (StD) (data as of 18 January 2023):

- "Health Care" (30 study programmes (StP));
- "Life Sciences" (2 StP);
- "Information and Communication Science" (9 StP);

- “Education, Pedagogy and Sport” (2 StP);
- “Social Welfare” (3 StP);
- “Sociology, Political Science, Anthropology” (11 StP);
- “Law” (4 StP);
- “Management, Administration and Management of Real Estate” (7 StP);
- “Psychology” (3 StP)
- “Internal Security and Civil Protection” (2 StP).

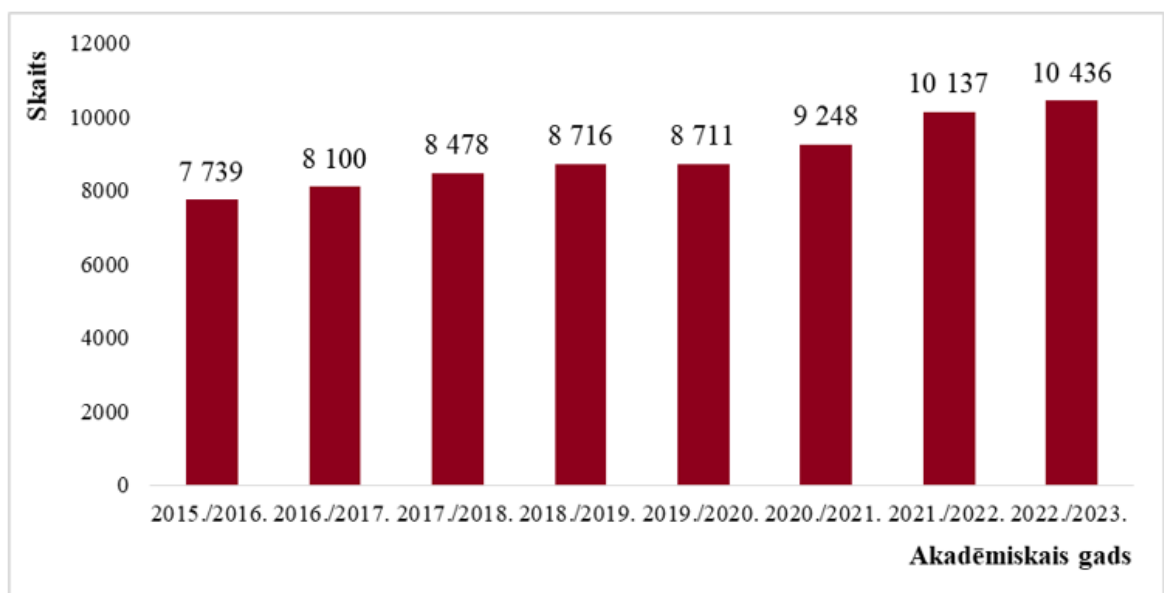
From 2017 to 2019, the StP Development and Consolidation Plan was developed at RSU (approved by RSU Presidium on 4 January, 2019, minutes No. 3-1/2/2019, approved by the Evaluation Commission for StP Development and Consolidation Plans established by the Ministry of Education and Science (MoES), MoES letter No. 4-6e/2018/3795), which is implemented with the support of the project “Reducing study programme fragmentation and promoting study internationalisation at Rīga Stradiņš University” (information in [Latvian](#), [in English](#)). During the development of the project, it is planned to consolidate 19 existing study programmes by 30.11.2023, as well as to develop and start to implement 6 study programmes. The doctoral study programme “Health Care” was developed within the StD and 6 programmes are being consolidated: AMSP “Physiotherapy”, DSP “Pharmacy”, DSP “Medicine”, 2LPSP “Paediatrics”, ABSP “Health Sport”. 1LPSP “Nursing” is already closed. Thus, the total number of programmes in the direction has decreased from 30 StPs at the time of accreditation in 2017 to 25 StPs. However, during the accreditation it is planned to add a professional Master's study programme “Supervision”, accordingly the total number of programmes in the direction is 26 programmes.

The approach to StP management implemented by RSU has contributed to the provision of high-quality and sector-relevant StP offer as evidenced by the increasing number of applicants and students in the StDs implemented by RSU (see Table 1, Figure 1 and Figure 2), especially considering the demographic crisis and the decline in the total number of applicants in Latvia. On 1 October 2022, the total number of RSU students was 10,436.

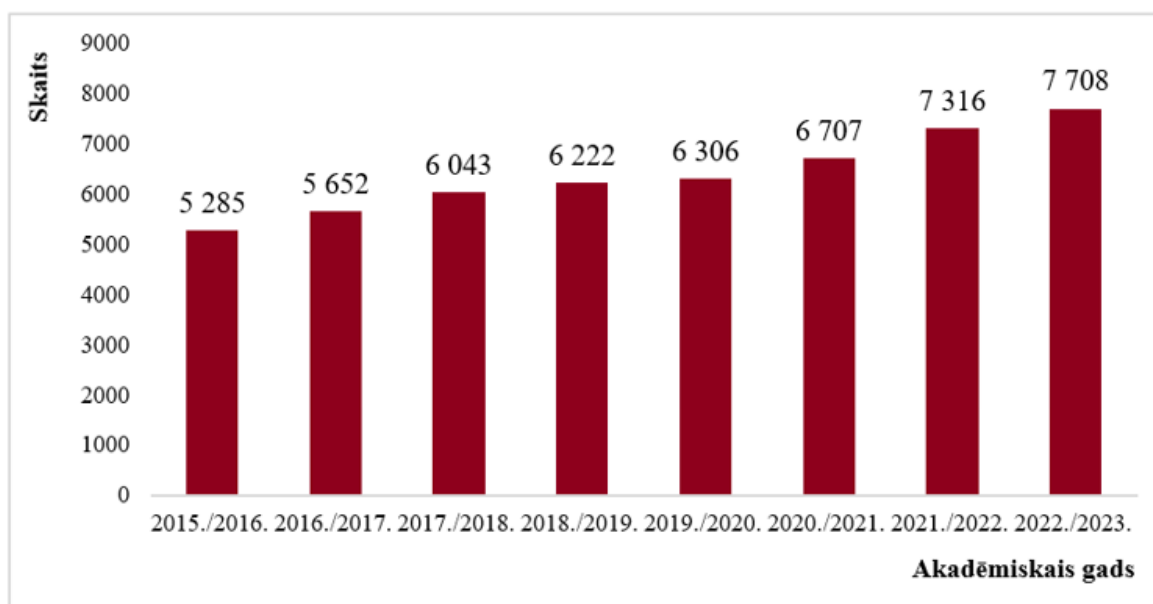
**Table 1. Total number of students in the study directions implemented by RSU over the last eight academic years**

<b>Study direction</b>	<b>2015/ 2016</b>	<b>2016/ 2017</b>	<b>2017/ 2018</b>	<b>2018/ 2019</b>	<b>2019/ 2020</b>	<b>2020/ 2021</b>	<b>2021/ 2022</b>	<b>2022/ 2023</b>
Health Care	5 285	5 652	6 043	6 222	6 306	6 707	7 316	7 708
Law	1 139	1 105	1 084	993	847	704	778	718
Management, Administration and Real Estate Management	207	225	226	243	218	261	334	366
Education, Pedagogy and Sport	236	232	228	235	266	285	273	226

Sociology, Politics and Anthropology	234	227	230	252	285	311	338	291
Social Welfare	138	146	126	143	150	125	120	100
Information and Communication Sciences	428	396	369	397	365	425	420	395
Psychology	66	111	121	143	167	279	391	461
Life Sciences	6	6	6	6	6	5	10	9
Internal Security and Civil Protection	0	0	45	82	101	146	157	162
<b>Total</b>	<b>7 739</b>	<b>8 100</b>	<b>8 478</b>	<b>8 716</b>	<b>8 711</b>	<b>9 248</b>	<b>10 137</b>	<b>10 436</b>



*Figure 1. Total number of students in the study directions implemented by RSU over the last eight academic years*



**Figure 2. Dynamics of the number of students in the study direction "Health Care" over the last seven academic years**

RSU Development Strategy 2022-2027 is available on RSU website [in Latvian](#) and [English](#). The main development goals of RSU are innovative studies in a modern environment and research into health, life and human sciences, including social responsibility for sustainable development of the university and society, twinning for integration in the labour market and internationalisation and reputation for international recognition.

The main development goals of RSU are the following:

- creation of locally and internationally significant research results;
- the implementation of education relevant to societal and individual needs to enhance overall human capital capacity.

The priority goals for sustainable development set by RSU and the contribution to their implementation are described on the website (information [in Latvian](#), [in English](#)).

RSU strategy provides for progress towards a modern education system compliant with the requirements of the future labour market.

The development of RSU StPs is based on the following basic principles:

- integrity of research and placement;
- modernisation of the study process (digitisation, introduction of innovations, simulation-based learning approach, etc.) for effective achievement of learning outcomes;
- promotion of academic integrity;
- cooperation and sharing of resources with local and foreign higher education institutions;
- development of interdisciplinary cooperation of industries with professional organisations;
- compliance of StPs with the development of the national economy and industries;
- promotion of the export capability of higher education and science;
- cooperation between higher education institutions in the implementation of StP, combining resources for extending the study, research and innovation potential;
- monitoring of the quality of studies and activities for targeted improvement.

In line with RSU mission and vision, as well as the main development goals set out in RSU Strategy 2022-2027, RSU Development Plan has been developed, consisting of six action lines:

1. Science.
2. Education.
3. Cooperation.
4. Digital transformation.
5. Governance.
6. Internationality.

Each action line has its own sub-goal, key objectives and actions to be taken, as well as key impact indicators and target values to monitor the progress in implementing the Strategy.

Implementation of the programmes is in line with the "Latvian National Development Plan 2021-2027". (available [in Latvian](#), [in English](#)), in which one of the priority directions is "Human-centred Health Care". The aim of this direction is equitable access to quality health services, which is in line with the current focus of the study programmes implemented within the study direction.

For the awards obtained by RSU, cooperation with schools and marketing activities, see Annex 13.

According to the forecasts of the Ministry of Economy<sup>[1]</sup>, the labour market demand for highly qualified specialists in the thematic area of education "Health Care" shows a significant increase of +47% between now and 2030. Looking at the market forecasts in different groups of education programmes, the highest growth in demand in numerical terms is expected for the programme groups "Medicine", "Health Services" Public Health", slightly more moderate demand is forecast for the programme groups "Dentistry" and "Public Health", while demand for highly qualified specialists in the programme group "Pharmacy" will remain stable in the long term. At the beginning of 2023, industry representatives have approached the Ministry of Health with a request to double the number of students enrolled in the programme "Pharmacy". In the programme group "Medicine", the increase in demand is expected at all levels of education (doctoral, Master's, Bachelor's), with a significant shortage of specialists expected in the labour market at both Master's and Bachelor's level. A shortage of specialists is also expected in the programme group "Health Services", where a rapid increase in the demand for highly qualified specialists is forecast at all levels<sup>[2]</sup>.

<sup>[1]</sup> The informative report on medium- and long-term labour market forecasts, Ministry of Economic of the Republic of Latvia, 2018

<sup>[2]</sup> Dynamic University. (2020). Research on the competitiveness of Rīga Stradiņš University and RSU Red Cross Medical College study programmes and their compliance with medium and long-term development trends in labour market and the sector.

## **1.2. Description of the management structure of the higher education institution/ college, the main institutions involved in the decision-making process, their composition (percentage depending on the position, for instance, the academic staff, administrative staff members, students), and the powers of these institutions.**

Activity of RSU is regulated by the Law on the Constitution of Rīga Stradiņš University, Law on Higher Education Institutions, as well as other external and internal laws and regulations. The said laws and regulations define the powers and duties of each institution. RSU decision-making is ensured by the Constitutional Assembly, Council, Senate, Rector and Academic Arbitration Court

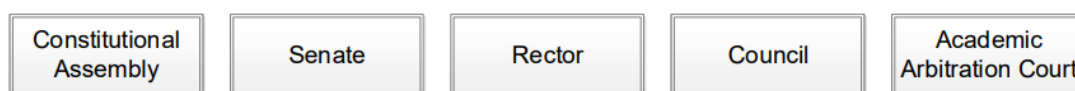
(information on RSU website [in Latvian](#), [in English](#)).

The new RSU Senate was elected at the meeting of the Constitutional Assembly on 23 September 2021. The composition complies with the regulations of RSU Senate: The Senate is composed of 31 senators, including the Rector *ex officio* and 30 elected senators, including 23 academic staff representatives (15 professors and associate professors and 8 other academic staff representatives), 6 student representatives and one RSU general staff representative. The first working session of the new composition was held on 12 October 2021.

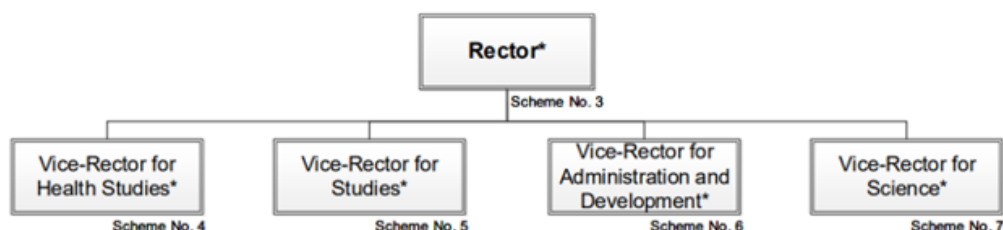
Efficient management and supervision of operational tasks at RSU are carried out by four Vice-Rectors: Vice-Rector for Health Studies, Vice-Rector for Studies, Vice-Rector for Administration and Development, Vice-Rector for Science, and their subordinate structural units of studies, science, administration and management.

As amended at the Council meeting of  
14 June 2023, Minutes No. 1-P-1/5/2023

## RĪGA STRADIŅŠ UNIVERSITY ADMINISTRATION



## RĪGA STRADIŅŠ UNIVERSITY ORGANIZATIONAL STRUCTURE



\* In RSU information systems Rector and Vice-Rectors alongside with structural units and staff under their authority have been classified under administrative body of relevant field.

Figure 3. **Organisational chart of Rīga Stradiņš University**

### **Participation of external partners in decision-making**

External partners participate in the meetings of RSU Convent of Councillors, Alumni Association, Study Quality Councils (SQC) and the meetings of faculties and departments.

Foreign and local specialists of various industries take part in RSU Convent of Councillors as external partners. The Convent of Councillors advises the Senate and the Rector on the matters of RSU development strategy in order to promote development of RSU by determining strategic directions of its activity in accordance with the needs of the national economy. The Convent of Councillors meets approximately four times a year and deals with current issues of RSU. Current issues for consideration may be raised by any member of the Convent during the meetings. For example, the plans for the development and improvement of RSU social direction were considered during the meeting, emphasising the improvement of interdisciplinary studies and research. During the meeting, the views of faculty leaders on the research potential of study programmes were presented, as well as the views and recommendations of the participants of the Convent of Councillors on the improvement and adaptation of study programmes were discussed.

The Study Quality Council is composed of both the management of the StD/StP, lecturers and student representatives, as well as representatives of employers. The Council evaluates the compliance of the content of the study programme with the requirements of the legislation of Latvia and the EU, public interests and the requirements of the labour market, as well as the long-term development of the respective study direction. (See Section 1.4 for more information on the activities of this Council)

Employers are involved in Faculty Councils. The composition of the Faculty Council is approved by the Senate on the basis of the proposal from the Dean of the Faculty.

The Alumni Association (information [in Latvian](#), [in English](#)) unites former graduates of various generations of Rīga Medical Institute, Medical Academy of Latvia and RSU. The Alumni Association is a contact point between graduates, students, academic staff and sectoral representatives. Mutual cooperation of the involved parties is essential for the improvement of study quality and research, development of the sector and purposeful guidance of students' professional activity. The Association promotes the involvement of RSU graduates in lifelong learning activities.

### **Student participation in the management process**

The Student Union (SU) (information [in Latvian](#), [in English](#)) represents the interests of students in the Constitutional Assembly, Academic Arbitration Court, Senate, Faculty Councils, Ethics Committee, Loan Granting Committee, Scholarship Awarding Committee, Library Council, Museum Council, Rectorate, Dean's Council, Study Quality Councils and the Committee for Recognition of Learning Outcomes Achieved in Prior Learning or Professional Experience. Student representatives have the right of veto in Faculty Councils; the right of suspended veto in matters affecting students' interests in the Senate.

Interests of international students at RSU are represented by the International Students' Association (information [in Latvian](#), [in English](#)).

The Student Union cooperates with the International Students' Association, ensuring that interests of both the Latvian and international students are represented in the management process.

RSU Student Union was established in 1993, and it has been operating in order to represent the interests of students in the matters of academic, material and cultural life at the university and other state institutions; it represents the students of the higher education institution in Latvia and



abroad, lays down the procedure for students to be elected in collegial institutions of the higher education institution.

The Student Union is financed from the University budget in the amount of not less than one two hundredth part of the annual budget of the University (in accordance with Section 53, Paragraph 4 of the Law on Higher Education Institutions of the Republic of Latvia (available [in Latvian](#), [in English](#)). At the end of each calendar year, RSU Student Union presents the use of the budget of the current year and the budget estimate for the following calendar year to RSU management, and it is accepted by the Rector. See Annex No. 5 for more information on the content of the SU activity.

### **Participation of structural units in decision-making**

Based on the developed medium-term strategy, the management of RSU annually delegates specific aims to the structural units. In order to achieve these aims, each RSU structural unit has to plan its own resources during the annual budget planning session, requesting the funds needed to achieve the delegated aims. Along with the development of a detailed budget, responsibilities are clearly separated because the structural units have to operate within the framework of the approved budgets. Working groups, discussions, and brainstorming sessions are being set up to implement new projects, processes, and innovations, thus maximizing the involvement of employees and immediate managers in decision-making.

See Annex 1. List of internal laws and regulations in accordance with the primary activity processes of RSU.

See Annex 3. RSU organisational chart (available also on the website in [Latvian](#) and [English](#)).

See Annex 23.1. "Compliance of the study programme with the 1st part of the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG)".

The governance structure of the study direction and the corresponding study programmes is geared towards development of the study direction (see Section 2.1, Paragraph 4.1 "Development Plan of Study Direction" and Paragraph 4.2 "Governance Structure of Study Direction"), decision-making is efficient; the support provided by administrative and technical staff ensures that all the needs of the study programmes corresponding to the study direction are met.

### **Information about the structural units involved in the implementation of the study programmes and the required support staff**

In order to ensure the academic activity and the quality of studies, academic departments employ study support staff providing support to students and academic staff, as well as ensuring the circulation of documentation. Depending on the type of the structural unit and the study courses taught, the positions for the training support staff are planned by the Head of the structural unit, but the general principles at RSU are developed and maintained by the Human Resources Department. Responsibility areas of the support staff in accordance with the respective position include support to study process and methodological work, support to research and clinical work, support to the department office work etc., as needed.

The StD Health Care with the corresponding StPs is implemented in Department of Anaesthesiology and Intensive Care, Department of Occupational and Environmental Medicine, Department of Paediatric Surgery, Department of Biology and Microbiology, Department of Human Physiology and Biochemistry, Department of Dermatology and Venereology, Department of Obstetrics and Gynaecology, Department of Pharmacology, Department of Pharmaceutical Chemistry, Department of Physics, Department of Family Medicine, Department of Humanities, Department of Internal Diseases, Department of Infectology, Department of Clinical Skills and Medical Technologies, Department of Surgery, Department of Welfare and Social Work, Department of Applied Pharmacy,



Department of Nursing and Obstetric Care, Department of Morphology, Department of Oral and Maxillofacial Surgery, Department of Neurology and Neurosurgery, Department of Ophthalmology, Department of Orthodontics, Department of Orthopaedics, Department of Otorhinolaryngology, Department of Pathology, Department of Paediatrics, Department of Psychiatry and Narcology, Department of Psychosomatic Medicine and Psychotherapy, Department of Radiology, Department of Rehabilitation, Department of Public Health and Epidemiology, Department of Sports and Nutrition, Department of Health Psychology and Pedagogy, Department of Prosthetic Dentistry and Department of Conservative Dentistry and Oral Health. The staff of the departments consists of full-time teaching staff, invited teaching staff and support staff.

The support provided by the administrative and technical staff of the University within the study direction is appropriate. The most advanced new generation information technology facilities are technically available. From the first day of study, the student knows where to turn if questions arise.

Technical issues of the systems are handled by the Information Technology Department, while the study process is supported by the Academic Affairs Department and the Faculty Office, which also provides feedback in communication with the student.

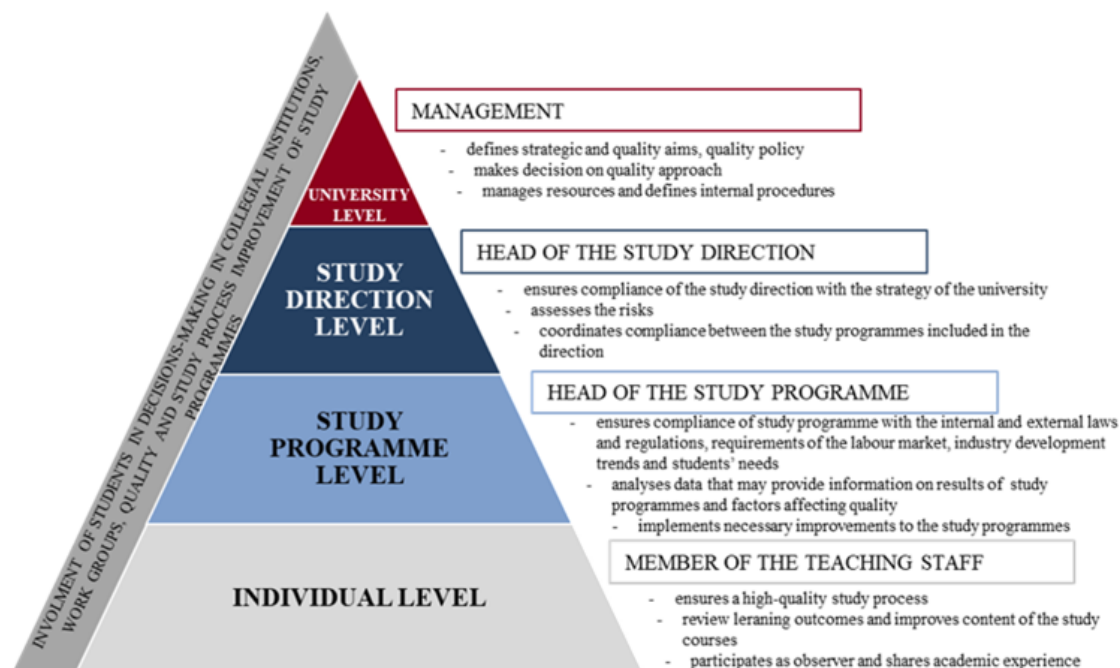
### **1.3. Description of the mechanism for the implementation of the quality policy and the procedures for the assurance of the quality of higher education. Description of the stakeholders involved in the development and improvement of the quality assurance system and their role in these processes.**

Quality policy of Rīga Stradiņš University is based on the university strategy and values, and it includes three basic principles: student-centred approach, partnership and quality.

The Quality Policy is available on RSU website in [Latvian](#) and [English](#). Both the staff and students of RSU are involved in the implementation of the Quality Policy. In general, study quality assurance is a multi-level system (see Figure 4).

The duty of RSU senior management is to set strategic and quality goals and quality policy, to decide on quality approach, to manage resources, and determine the internal procedures. Supervision of the implemented quality system in RSU is carried out both by internal system and quality auditors, and independent external experts. One of the indicators of study quality at the University level is the public attitude and opinion, as well as the popularity of RSU. Evaluating the satisfaction level and engagement of RSU staff as well as the results of the university reputation survey, guidelines are set to improve the image of RSU.

At the StP level, the StP Director is responsible for ensuring that the content of the StPs complies with internal and external laws and regulations, requirements of the labour market, sectoral development trends and needs of students; for analysing data that can provide information about factors affecting learning outcomes and the quality of the StPs, and for making necessary improvements to the StPs. Quality indicators of the StPs that are directly linked to the remuneration of the StP Directors are measured annually. This aspect promotes accountability and motivates the StP Directors to achieve higher quality standards defined.



**Figure 4 Quality assurance of RSU study process and outcomes**

Supervision of the system introduced at RSU is provided by both the internal system and quality auditors and independent external experts.

External and internal laws and regulations (available [in Latvian](#), [in English](#)) governing the achievements of students and the assessment of learning outcomes:

- Law on Higher Education Institutions
- Education Law
- Academic Regulations I - Regulations for undergraduate studies and Master's studies (available [in Latvian](#), [in English](#));
- Academic Regulations II – Regulations for studies in Residency (available [in Latvian](#)
- Academic Regulations III – Regulations for Doctoral Studies (available [in Latvian](#) and [in English](#));
- Regulations on Writing and Defence of Qualification Paper, Student's Research Paper, Bachelor's Thesis and Master's Thesis (available [in Latvian](#), [in English](#));
- Process Description No 6 "Assessment and Submission of Learning Outcomes", etc. (available [in Latvian](#) and [in English](#))
- Analysis of student academic performance that is carried out twice per academic year after the end of the study semester. As a result of monitoring academic success, risks to successful study process and reasons for exclusion are identified, on the basis of which it is possible to take preventive actions.

In 2016, an international external assessment of the implementation of student-centred learning approach at RSU was done by a group of assessment experts of the project *Peer Assessment of Student-Centred Learning (PASCL)*. Report of PASCL experts on the implementation of student-centred approach at RSU is available both [in Latvian](#) and [English](#). This was an EU-level project promoted by the European Students' Union in cooperation with other European higher education organisations, whereas the expert visit to Riga was initiated by RSU Student Union. RSU is one of the few higher education institutions in Europe that took an institutional decision to get involved and was chosen within the framework of the PASCL project.

The expert opinion described RSU as a student-centred higher education institution that actively

involves students in the improvement of the study process. The report also contained recommendations on how to further promote student engagement in the study process and improve the understanding and implementation of the student-centred approach at all levels at institutional level, which RSU has used to improve the handling of student feedback on learning, improve the e-studies environment, update assessment approaches and enhance the effectiveness of internal communication. Since RSU participation in the *PASCL* project, various aspects of student-centred learning have been regularly put forward as guiding principles in the planning of the work of the Study Administration, agreeing on the ongoing projects with the aspects of student-centred learning to be improved.

The procedure for assessing the achievements of students and the learning outcomes is incorporated in the description of each study course. Prior to the start of the course, students are informed about the planned learning outcomes of the course, the examinations that will certify the achievement of the learning outcomes and the assessment criteria for these examinations. The course leader is the one who decides on the assessment system in their course. Successful passing of mid-semester examinations and end-of-course examination, active participation in seminars and discussions, independent work, demonstration of the acquired clinical skills, etc. are most frequently set as criteria for completing the course. Working in RSU e-learning environment, the support staff of the Department Office draw up assessment lists for examinations that are distributed to teaching staff at the end of the study course. After the examination, the staff lecturer in person or the invited lecturers, assisted by the staff of the Department Office, publish the final marks in the e-environment, which is linked to the personal accounts of the students. Each student sees information related to studies and their assessments in their personal account.

**1.4. Fill in the table on the compliance of the internal quality assurance system of the higher education institution/ college with the provisions of Section 5, Paragraph 2(1) of the Law on Higher Education Institutions by providing a justification for the given statement. In addition, it is also possible to refer to the respective chapter of the Self-Assessment Report, where the provided information serves as justification.**

1.	The higher education institution/ college has established a policy and procedures for assuring the quality of higher education.	RSU has an established policy and procedures for quality assurance of higher education, which are determined by internal regulatory documents described in Sections 1.3, 2.1.1, 2.2.1 and 2.2.2 of the Self-Assessment Report and in Paragraph 1.1 of Annex 23.1 (Compliance of RSU study programmes with Part 1 of the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG)). They define the quality mechanisms of the study process at RSU and which apply to all study programmes.
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2.	<p>A mechanism for the creation and internal approval of the study programmes of the higher education institution/ college, as well as the supervision of their performance and periodic inspection thereof, has been developed.</p>	<p>RSU has developed a mechanism for the creation, internal approval, supervision and periodic review of the StPs of the higher education institution, which is described in sections 2.2.1, 2.2.2 and 2.2.3 of the Self-Assessment Report and paragraphs 1.2, 1.7 and 1.9 of Annex 23.1 (Compliance of RSU study programmes with Part 1 of the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG)) and applies to absolutely all StPs. It is supervised by the Centre for Educational Growth (PIC), and at the same time it also conducts improvements of the system, provides support to the directors of the study programmes and directions in this process taking into consideration its experience within the framework of its competence. An example of this is the StPs developed under the Specific Support Objective, which is described in Latvian and English. The improvement and development of the StPs have been implemented upon drafting the development plan for the StD. The actual process is discussed at the meetings of the Study Direction Quality Council and the department meetings, Faculty Council meetings and StP Quality Councils. The process of the development of StPs has been constantly monitored by analysing students' academic performance, number of students, drop-out rate, technical facilities, assessment, work quality of the academic staff and other essential indicators.</p>
3.	<p>The criteria, conditions, and procedures for the evaluation of students' results, which enable reassurance of the achievement of the intended learning outcomes, have been developed and made public.</p>	<p>For criteria, conditions and procedures for the assessment of students' academic performance, which enable reassurance of the achievement of the intended learning outcomes, see Section 2.1.5 and Annex 17.1 (Compliance of the study programme with the National Education Standard (for each study programme)) and paragraph 1.3 of the Annex 23.1 (Compliance of RSU study programmes with Part 1 of the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG))</p>
4.	<p>Internal procedures and mechanisms for assuring the qualifications of the academic staff and the work quality have been developed.</p>	<p>Internal procedures and mechanisms for ensuring the qualifications of the academic staff and the work quality are described in Sections 2.3.5, 2.3.6, 2.3.7 and in Paragraph 1.5 of Annex 23.1 (Compliance of RSU study programmes with Part 1 of the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG)). Each year compliance assessment is conducted, and the mechanisms are reviewed.</p>

5.	<p>The higher education institution/ college ensures the collection and analysis of the information on the study achievements of the students, employment of the graduates, satisfaction of the students with the study programme, efficiency of the work of the academic staff, the study funds available, and the disbursements thereof, as well as the key performance indicators of the higher education institution/ college.</p>	<ul style="list-style-type: none"> <li>□ For the information on student academic performance, see Section 2.1.5.</li> <li>□ For the information on graduate employment, see Section 3.1.3 (for each study programme) and in Annex 10: Employment of Graduates and in Annex 12: Study on the compliance of study programmes with the medium and long-term development trends of the labour market and sector.</li> <li>□ For the information on graduate feedback mechanisms, see Sections 1.2 and 2.2.4.</li> <li>□ For the information on student and graduate satisfaction with the StP, see Section 2.2.3 and the following annexes: 21.1. Survey results on the evaluation of the study programme and study courses, 21.2 Results of graduate survey (for each study programme) and paragraphs 1.7 and 1.9 of Annex 23: Compliance of RSU study programmes with Part 1 of the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG).</li> <li>□ For the information on the efficiency of the academic staff, see Sections 2.3.7 and 2.4.4, 3.4. (for each study programme) and in Annex 6.1 Basic information about the teaching staff involved in the implementation of the study direction “Health Care”, 6.2 Biographies of the teaching staff, 6.3. Collection of statistical data on the incoming and outgoing mobility of the teaching staff during the reporting period and 6.4. List of publications by the teaching staff for the reporting period and 24.7 Analysis of the composition of the teaching staff (for each study programme).</li> <li>□ For the information on available study funds and their costs, see Sections 2.3.1, 2.3.2, 2.3.3, 2.3.4 and 2.3.8 and Annex 23.1: Compliance of RSU study programmes with Part 1 of the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG). 23.2 Assessment of the informative and methodological provision regarding library resources for the implementation of the study direction “Health Care” in accordance with the requirements of the Guidelines and 23.3 Assessment of the information and methodological basis for IT resources.</li> <li>□ For the information on the essential indicators of the higher education institution’s activities see Sections 1.1, 1.2 and 1.3. and on RSU website in Latvian and English.</li> </ul>
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6.	The higher education institution/ college shall ensure continuous improvement, development, and efficient performance of the study field whilst implementing their quality assurance systems.	The higher education institution ensures continuous improvement, development, and efficient performance of the study direction whilst implementing their quality assurance systems. This is described in sections 1.3, 2.1.1, 2.1.2, 2.1.3, 2.2.1, 2.2.2 and Annex 23.1: Compliance of RSU study programmes with Part 1 of the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG). See Annex 4.1 Development Plan of the StD, Annex 4.2 Management Organisation of the Study Direction and Annex 11 Recommendation Implementation Plan.
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## 2.1. Management of the Study Field

### 2.1.1. Aims of the study field and their compliance with the scope of activities of the higher education institution/ college, the strategic development fields, as well as the development needs of the society and the national economy. The assessment of the interrelation of the study field and the study programmes included in it.

RSU Strategy 2022 – 2027 (available [in Latvian](#), [in English](#)) defines RSU vision and mission, as well as sustainable development goals and key development goals until 2027, including Research platforms and directions. RSU vision and one of its main goals is to provide research-based, high-quality and exportable higher education in Europe and in the world. RSU provides a solid foundation for academic and professional education and research work. One of RSU research platforms is medicine. It pools RSU resources at an interdisciplinary level to conduct world-class research and develop methods for diagnosing and treating the most common diseases in the EU. RSU is constantly modernising its study process, which provides young specialists with more opportunities for growth.

The **aim** of the study direction "Health Care" is aligned with RSU's strategic goals and the overall mission of the university, which is: **To provide excellent, research-based and inclusive education of health care professionals to promote sustainable development of public health and well-being, realizing everyone's potential throughout life.**

The study programmes within the study direction "Health Care" have been implemented at Rīga Stradiņš University that has obtained the international Quality Management System ISO-9001 standard certificate (See RSU Quality Policy (information in [Latvian](#), [in English](#), certificate ISO 9001). The standard of RSU quality management system includes the ENQA (*European Association for Quality Assurance in Higher Education*) internal quality assurance standards for studies and guidelines for quality evaluation in the European Higher Education Area, as well as the requirements of the Law on Higher Education Institutions of the Republic of Latvia. The quality management for the StPs is maintained in accordance with the higher education institution management process defined by the ISO standard.

In the course of the development of higher education in Latvia, RSU was granted the status of a

science university, which allows emphasizing the role of research in the operation of the entire university, including in the field of health care. At the same time, the RSU should also prepare practicing specialists for the Latvian national economy. Out of the 26 study programmes in the study direction, 20 programmes have normatively determined requirements with a professional standard, and in 16 programmes regulated professions are acquired. Therefore, it should be noted that the training of health care professionals is carried out by fulfilling the national task - implementing the national personnel policy of the health care system and fulfilling this task through research and development.

The direction of study includes StP, which prepare the state needed specialists in various health care sectors, starting with bachelor's level, master's degree, graduates of II-level professional programmes, doctoral students. Graduates from more than twenty health care study programmes work in Latvian health care, which allows us to say that the study field as a whole and the StPs in it form a full "palette" of specialties for national health care, which are complementary to each other, their content, goals and tasks are mutually agreed, avoid overlapping or duplication.

The direction of studies is in the process of constant improvement and development. For example: after RSU has acquired the status of a science university, research activities are promoted in all major study programmes, the number of high-quality scientific publications increases, applications are made for RSU research grants, Latvian Science Council grants, various international financial sources, including Horizon projects. This shows coordinated cooperation of StP within the framework of a single study direction, not only in academic, but also in research activity.

**2.1.2. SWOT analysis of the study field with regard to the set aims by providing explanations on how the higher education institution/ college expects to eliminate/ improve weaknesses, prevent threats, and avail themselves of the given opportunities, etc. The assessment of the plan for the development of the study field for the next six years and the procedure of the elaboration thereof. In case there is no development plan elaborated or the aims/ objectives are set for a shorter period of time, information on the elaboration of the plan for the development of the study field for the next assessment period shall be provided.**

The development plan of the StD “Health Care” (see Annex 4.1) is devised and annually approved in a joint working group with the members of the Study Quality Council, carrying out the annual StP quality assessment and preparing the report. The SWOT analysis and the StD development plan, compiled and evaluated annually prior to accreditation, were reviewed and updated.

Internal factors	
Strengths	Weaknesses

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| <ul style="list-style-type: none"><li>· Use of modern study methods and their continuous development.</li><li>· A very wide clinical learning base: hospitals, outpatient institutions, clinical research institutions, private healthcare sector, etc.</li><li>· Cooperation with a large number of professional associations, organisations and international professional associations.</li><li>· RSU Library resources available to students correspond to the capacity of the national Library.</li><li>· Implementation of a student-centred approach in the study process</li><li>· A high proportion of elected academic staff.</li><li>· System for the progress of pedagogical development of teaching staff, which in cooperation with PIC and other institutions achieves the development of professionalism in teaching.</li><li>· Long-term experience and traditions of RSU in academic and research work in healthcare sector.</li><li>· State-funded study opportunities attracted by RSU.</li><li>· High quality of studies.</li><li>· Good, modern provision of material and technical training base.</li><li>· A highly developed and widely expanded e-learning process guaranteeing the modernisation and accessibility of studies also in the event of potential crises (e.g. the COVID-19 pandemic).</li><li>· Opportunity for students to evaluate and influence the study process by introducing a compulsory student survey process and a compulsory feedback system for teaching staff.</li><li>· Rapid development research promotion system: RSU grants, participation in Latvian and international projects, the Cabinet of Ministers, Ministry of Education and Science, Ministry of Health and other announced research projects with a significant contribution of results, organisation of a financing system for the development of research development, etc.</li></ul> | <ul style="list-style-type: none"><li>· Average age of the academic staff, generational change</li><li>· Lack of methodological literature in Latvian.</li><li>· Low completion of study course evaluation questionnaires; insufficient active feedback from teaching staff on survey results.</li></ul> |
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## External Factors

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### Opportunities

- Restructure the number of state-funded study places in order to ensure the increase of study places for the requested study programmes and to evaluate the usefulness of the number of unpopular study places.
- Improve the content and visibility of the study programme in accordance with modern international requirements.
- Continue to attract balanced number of international students
- Intensify participation in international projects, attraction of grants, participation in consolidation processes planned by the Cabinet of Ministers, Ministry of Education and Science and the Ministry of Health, etc. in order to improve the content, organisation and management of the STP and attract the necessary funding at the same time.
- Further development of pedagogical skills of teaching staff.
- Further improve the student-centred approach by introducing mandatory surveys among students.
- To develop digitalisation processes, for example, to introduce new study courses in the compulsory elective category, to develop high level digital skills courses developed in cooperation with specialists of the University of Buffalo (USA).
- Introduce new topical study courses, such as Military medicine, etc.

### Threats

- Low pay for teaching staff threatens the attraction of teaching staff and the attraction of high-level professionals as teaching staff, especially in clinical sectors and study courses.
- Low pay in the field (for example, for graduates of the Social work Programme), which does not allow students to join fee groups.
- Unpredictable reforms in higher education, non-alignment of laws and regulations (for example, the existence of a threat to interdisciplinary study programmes threatens the existence of the doctoral study programme "Health care").
- Failure of national systems to organise healthcare study process in a number of clinical institutions; difficulties in organisation of students' clinical training in particular medical institutions.
- Lack of funding for health care, which makes the process of education comprehensively difficult, infrastructure development possibilities, wage policy in the field of education.

The development plan for the STD "Health care" (see Annex 4.1) is based on the developed and revised development plans for study programmes. The development plans are approved annually by the Faculty councils, with the Heads of the study programme performing the annual STP quality assessment and preparing the report.

- Use of modern study methods and continuous development

Since the previous accreditation, the study direction has developed modern and particularly important teaching and pedagogical methods, such as: interactive types of remote studies. (Zoom, MST, FaceTime translations, You Tube translations and recordings, Online conferencing translations and the use of clip recordings for studies).

Methodology of simulation technologies has gained a very significant role in the study process and

accordingly rapid development: simulations of manipulations, simulations of clinical processes, simulations of processes. To this end, additional financial investments have been made both in different departments of the study direction and at the medical Education Technology Centre (METC). various simulation methods can be found in practically all the programmes of the study direction.

In addition to innovative study methodologies, teaching staff learn at the Centre for Educational Growth, lesson observation processes in many universities of the world, exchange visits and other forms of international cooperation.

- High quality of studies

The quality of studies is monitored in accordance with the study quality control processes at RSU: deans of faculties, STP councils, quality councils, deans' Council, Senate follow quality measurement indicators, analyse them, make specific proposals for process improvement and quality improvement.

- A very wide clinical learning base: hospitals, outpatient institutions, clinical research institutions, private healthcare sector, etc.

In order to implement the study direction, close cooperation with clinical placement locations, medical institutions, pharmaceutical companies, rehabilitation institutions and others is required. At present, 150 cooperation agreements exist in RSU Health direction, which allow for student training. At the same time, the tendency of industry companies to “capitalise” bilateral relations should be noted, for example, by significantly increasing the fee for the presence of students in these companies.

- Cooperation with a large number of professional associations, organisations, international professional associations

Most directors of the STP are leading employees, experts or managers of various healthcare associations. There is also cooperation with organisations such as the Latvian medical Association, Latvian nursing Association, which is one of the largest and most influential in Latvia. International cooperation at the level of Heads of departments and directors of study programmes is also successful.

- High number of elected academic staff

The number of elected academic staff during the reporting period is around 65%, which complies with the requirements set by the Latvian regulations. This is considered to be the prerequisites for stable staff recruitment, staff policy and high quality studies.

- RSU Library resources available to students correspond to the capacity of the national Library

In order to guarantee the presence of the most up-to-date e-literature available, RSU Library guarantees subscription to demanded and well-established databases. The demand for databases is identified through student surveys. Amboss is currently the most topical e-study base in the study direction. Other bases are also available. Of course, the availability of printed materials, books and magazines is also made available to the students and teaching staff of the study direction. It should be noted that RSU Library is maintained to correspond to the status of a national Library and it is the only medical Library with such status in Latvia.

- Implementation of a student-centred approach in the study process

The involvement of students in all areas of the academic, research, administrative and social university life is comprehensive. Academic questions together with teaching staff are also decided

by students: group leaders, group leaders, representatives of Faculty boards, members of the Dean's Council - students, Senators - students, members of the quality boards. The study direction also supports student self-activities in the field of research: the Student Union decides on the activity, formation and number of student research interest groups. Twice RSU has held international student scientific conferences for 2 days with participation of several thousand students. These are the components of RSU Research week that promote the transferability of researchers' voices: the most outstanding researchers of the Health study direction - prospective researchers from the student environment.

As already mentioned, students work at all academic-administrative levels: faculties, Faculty Councils, quality Councils, Senate. The student representative also participates in the meetings of RSU Rectorate, where issues of outstanding importance for the health study direction are also decided.

The organisation of social life of students is mainly among the initiatives of the Student Union, including the active participation of the students of the Health direction. In the field of culture, leisure, sport, communication and strengthening the corporate spirit, students do a lot of work and develop the positive image of the students of the health direction in society and the positive reputation of RSU in general, especially among young people.

- RSU long-standing experience and traditions in academic and research work in healthcare sector

RSU as a whole and its employees - representatives of the Health study direction are leading specialists in the country in various health sectors; many of them are the Ministry of Health's chief specialists, association managers, clinic heads of the university hospitals, heads of centres and departments. The colleagues responsible have acquired this competence in the university's long-standing traditions and in respectful heritage. The study direction "Health care" is known in the country for being a socially responsible, scientific and particularly competent direction of academic education. The collegial institutions of the direction, in general the entire management of RSU, support and promote the strengthening of this excellent reputation in the society: in mass media, conducting responsible activities and expertise, for example during the COVID-19 pandemic, involving experts from the direction in scientific development of healthcare policy and other ways.

- Good, modern provision of material and technical training base.

There is a sufficient number of rooms at the disposal of the study direction; renovations at Riga clinical hospitals are periodically carried out, student campuses are created, for example, Riga East clinical University hospital, P.Stradins clinical University hospital. A new building was built in Tico for study and research purposes on Konsula Street; a new group of students is planned on Kuldigas Street, etc. The study process is provided by a modern IT base with Internet access to all RSU buildings, including student hostels. Anninmuizas Boulevard has the largest medical simulation process Centre (METC) in the Baltic States, where students of the study direction have access to all types of simulation equipment, equipment and complexes. Electronic databases provided by RSU Library are subscribed for study purposes. The availability of printed publications is constant and very extensive.

- A highly developed and widely expanded e-learning process guaranteeing the modernisation and accessibility of studies also in the event of potential crises (e.g. the COVID-19 pandemic).

During the first days of the COVID-19 pandemic, online study opportunities were immediately activated to ensure the continuity of studies: Zoom, MST, Panopto; several hundred lectures in Panopto e-tool were additionally recorded in a short period of time; the student portal and the teaching staff portal work in parallel, which guaranteed a fast and modern flow of information both

on organisational issues and for the implementation of the content of interactive studies.

- Opportunity for students to evaluate and influence the study process by introducing a compulsory student survey process and a compulsory feedback system for teaching staff.

In order to achieve a more fully student-centred approach, it was decided to introduce a compulsory survey after each study course in cooperation with the Student Union that would allow students to find out their opinion and proposals regarding its organisation. The lecturers' feedback shall also be considered mandatory, ensuring communication with students and respect for the point of view of students. Thus, it is possible to better implement a student-centred attitude. In addition, students' participation in all elected academic structures at RSU: Faculty Councils, quality Councils and elsewhere should be mentioned.

In order to reduce or eliminate the impact of weaknesses of the study direction, a number of actions are taken:

- Average age of the academic staff, generational change

The involvement of young and prospective teaching staff and researchers in the study direction is considered a necessary development step both within the study direction and throughout RSU. The possibility of reducing the participation of professors and associate professors in conducting seminars is discussed collegially, instead giving greater importance to assistants, adjunct lecturers and assistant professors. Research activity is promoted with the involvement of new teaching staff. Doctors, medical residents, are widely involved in the programme medicine, which in the future often also focuses on pedagogical activity. The status of an emeritus (honorary) professor and emeritus researcher has been introduced at RSU, where professors-seniors are elected through voting. It allows younger, experienced colleagues to be elected in the positions of professors.

- Lack of methodological literature in Latvian.

In order to increase the availability of literature and methodological tools, RSU Tippography publishes 3-4 monographs in Latvian that go on RSU Library shelves, as well as a number of methodological tools. The number of books varies between years.

- Low completion of study course evaluation questionnaires; insufficient feedback from teaching staff on survey results.

As mentioned above, compulsory completion of questionnaires by students and the link between the teaching staff and them are introduced. This is happening in the e-learning environment. The questionnaires are anonymous.

In order to take advantage of the opportunities for the development of the study direction, measures and actions are taken:

- To restructure the number of state-funded study places in order to ensure the increase of study places for the requested study programmes and to evaluate the usefulness of the number of unpopular study programmes.

The management of the study direction, together with experts of the academic Affairs Department and the Finance Department, regularly participate in the situation analysis on the rational use of study places, filling the excluded student places with successful students. Discussions with the Ministry of Health on allocated study places are periodically held and, if necessary, amendments to the contract (RSU-VM) are made, shifting study places from one direction study programme to another. Thus, more efficient planning and use of study resources, staff work and infrastructure

resources is ensured.

- Improve the content and visibility of the study programme in accordance with modern international requirements.

The content of the study programmes is reviewed at least once a year - before the beginning of the year of studies, but individual courses are evaluated before the beginning of each semester. The programme director shall be responsible for the quality of the programme, but quality councils and faculty councils shall be responsible for quality monitoring. In order to ensure that the content of programmes corresponds to a modern international level, RSU internationalisation policy is widely implemented: experience visits of teaching staff such as ERASMUS+, etc., organisation of international conferences, participation in international forums and a number of other activities.

- Continue to attract balanced number of international students

The current internationalisation policy at RSU has allowed to attract students from more than 50 countries to studies. This is promoted both by targeted recruitment policy and by the high quality and reputation of the programmes medicine and dentistry. A sound internationalisation policy and attraction of international applicants are still needed, which also contributes to the monitoring and modernity of the quality of study programmes.

- Intensify participation in international projects, attraction of grants, participation in consolidation processes planned by the Cabinet of Ministers, Ministry of Education and Science and the Ministry of Health, etc. in order to improve the content, organisation and management of the STP and attract the necessary funding at the same time.

Academic, scientific and administrative staff of the study direction together with all RSU management participate in activities initiated by the Ministry of Education and Science, such as SAM 8.2.1, SAM 8.2.2, SAM 8.2.3, as well as in internal and external events of consolidation of Latvian institutions of higher education, digitalisation processes, preparation for institutional evaluation measures of the University, etc.

- Further development of pedagogical skills of teaching staff

In order to continue the improvement of teaching staff's pedagogical skills, a decision has been taken at RSU as a whole (a Rector's decree has been issued), which provides for each teaching staff to devote several academic hours to pedagogical growth under the guidance of the Centre for Educational Growth once a year; training events organised by the Centre for Educational Growth are already attended by around 30% of all teaching staff; it is planned to increase this amount significantly

- Creation of new topical courses

Along with representatives of healthcare industry, foreign universities, such as Buffalo University (USA), new study courses are being developed for the study direction programmes, such as Digitalisation, Military medicine, etc. Develop a military medicine course in cooperation with the Ministry of Defence and experts from the specialists of the U.S. Military Corps in Europe.

It should be noted that a number of circumstances may cause an undesirable impact and threat to the full functioning of the study direction. These are listed below. The management of the study direction together with RSU management take measures to reduce or prevent threats.

- Low pay for teaching staff threatens the attraction of teaching staff and the attraction of high-level professionals as teaching staff, especially in clinical sectors and study courses.

Throughout RSU, including the study direction “Health care”, work remuneration is periodically reviewed, a motivation system or performance supplements are created. For creative and particularly high-quality performance of the position, possible variable parts of the salary up to 20-30% of the existing remuneration. The Supervisor shall review the results and quality of the Paper for the employees under his/her responsibility. In addition, a performance supplement for research paper during the year may be noted, which is particularly important for the staff of the research university. There are institutional “bonuses” such as health insurance. The measures are aimed at improving the competitiveness of remuneration in comparison with sharply increased wages in the healthcare sector, especially during the COVID-19 period.

- Failure of national systems to organise healthcare study process in a number of clinical institutions; difficulties in organisation of students' clinical training in particular medical institutions.

Clinical studies and placement are especially important in the field of health care in order to guarantee students skills, knowledge and competences that are absolutely necessary when starting regular employment in the profession or further studies, such as in residency. However, there is no legally strengthened system in Latvia that ensures participation of healthcare students in the work of healthcare institutions. In some cases, invoices are made for the placement in medical institutions that are incompatible with the financing of the study direction. However, in order to ensure the implementation of the content of study programmes, which envisages both clinical training and placement, the management of the study direction and RSU management promote communication with the management of medical institutions, justify their own financial calculations, communicate with the Ministry of Health, inviting additional funds to be allocated for the implementation of study programmes. At the same time, communication with outpatient sector, private sector and regional medical institutions takes place, looking for the possibility to implement clinical training and placement.

- Lack of funding for health care, which makes the process of education comprehensively difficult, infrastructure development possibilities, wage policy in the field of education.

RSU management is in constant contact with the Ministry of Education and Science and the Ministry of Health, delegates the task of negotiating with these institutions with the management of the study direction in order to explain the need for more public funding for the academic and research process, especially under circumstances, this year RSU is included in the list of Latvian universities of Science. Many researchers and teaching staff of the study direction participate in research projects, programmes and implementation of courses that create own funds and facilitate academic and research activities. The presence of fee-based students in the programmes within the study direction: medicine and dentistry makes a significant contribution. These own funds are used to improve the quality of studies, modernisation and infrastructure needs.

To sum up and self-evaluate, it can be concluded that activities are carried out to maintain **the strengths** of the study direction in the implementation of the study programmes and **to reduce the weaknesses**. These **opportunities are already being and will be used**, e.g. good cooperation with industry representatives is maintained; visiting lecturers are involved in the implementation of the programmes and other activities are also implemented. **In order to reduce the impact of external threats**, it is necessary to act in accordance with RSU strategy and development goals. The external threat may be reduced to some extent by RSU financial capacity and contribution to science.

**2.1.3. The structure of the management of the study field and the relevant study programmes, and the analysis and assessment of the efficiency thereof, including the assessment of the role of the head of the study field and the heads of the study programmes, their responsibilities, and the cooperation with other heads of the study programmes, as well as the assessment of the support by the administrative and technical staff of the higher education institution/ college provided within the study field.**

The management of the study direction and the corresponding programmes are carried out in accordance with the Process Description No 35 "Planning and administration of the study process" (Rector's decree of 31.07.2020).

The management structure is composed of:

- academic structural unit:
- The Study quality Council - the Quality Council of the study direction "Health Care", which includes representatives of students and employers;
- Director of the study direction:
- Faculty Council
- The StP Quality Councils, which, like the direction Council, includes representatives of employers and students;
- Directors of the StP:
- Lecturers of study courses.

The effectiveness of the management structure can be found in the context of RSU Quality Policy (available in [Latvian](#), [English](#)), against certain quality criteria,<sup>[1]</sup> and the achievement of the aims of the study direction and the relevant study programmes.

RSU quality indicators include the institutional level, the content level, the individual level (students, lecturers) and the employers' perspective, a total of 14 criteria.

Students' satisfaction with their studies, indicators of the academic achievement, student participation in the development of the StP, as well as graduates' employment in the sector and employers' feedback on student work during placements or graduates' competence, indicate the effectiveness of the management structure and process in achieving the set goals.

**The role of the head of the study direction and directors of study programmes**

The director of the StP is both a programme developer, an organizer and coordinator of the study process, and a support provider to the lecturers of the study courses involved in the implementation of the StP and an encourager to the students.

The director of the StP is responsible for developing/updating the StP content, planning the acquisition of the StP and preparing the plan for approval by the Council of Deans. The director of the StP is responsible for ensuring the examination of knowledge, skills and competences and their compliance with the learning outcomes; is responsible for the organisation of placement, cooperates with the lecturers and students of study courses, cooperates with employers to find out the satisfaction of employers with the competences of the graduates.

The role and responsibility of the head of the department is the coordination of study programmes in a way when the study programs complement each other, and each of them corresponds to the common goal and tasks of the department. The head of the study direction familiarizes himself with the structure, content and performance of each programme in order to evaluate its compliance and

belonging to a single direction. The head assesses the demand for study places in various programmes, student dropout, if any, its volume, dynamics by year and reasons. The head of the study direction follows the development of the industry in the country, the demands of health companies and other institutions for various specialists and provides ideas for creating new study programmes in the direction, if there is a rational basis for it. At the same time, in the atmosphere of consolidation, integration and interdisciplinarity, the head of the direction sees opportunities for sharing resources between already existing programmes. It is also essential to conduct a financial analysis of the operation of the study programmes. At a time when there is not enough funding for the optimal financing of educational programmes, the head of the study direction draws the attention of the programme directors to the financial indicators of specific programmes and involves financial, personnel or other specialists in the data analysis. In general, the head of the study direction manages the structure, quality and development of the study direction and the compliance of the direction with the realization of the interests of the national economy in the relevant sector.

The head of study, in close cooperation with the directors of the Department of Education, collects and analyzes the results of the Department of Education, prepares reports and reports, develops guidelines for development plans of study programmes of the department of study, organizes the work of the quality council of the department of study, prepares the conclusion of contracts with external partners, such as medical institutions for internships and performs a range of other pressing management tasks.

See Annex 4.2. Management of the study direction and 4.1. attachments: Study programme development plan.

[1] Quality indicators of RSU study programmes. Approved by the Rector's Decree No 2-3/166, 2016, (see Annex 1).

**2.1.4. Description and assessment of the requirements and the system for the admission of students by specifying, inter alia, the regulatory framework of the admission procedures and requirements. The assessment of options for the students to have their study period, professional experience, and the previously acquired formal and non-formal education recognised within the study field by providing specific examples of the application of these procedures.**

Admission to RSU takes place based on the admission requirements of the respective study level approved by RSU Senate as defined for the particular academic year in accordance with the requirement of the Law on Higher Education Institutions. RSU has admission regulations for each level of study. The admission regulations are available on RSU website [in Latvian](#) and [English](#), as well as in Annex 1. See Annex 23, Paragraph 1.4 for more information: Student matriculation, progress of studies, recognition and certification of qualifications.

RSU provides admission procedures appropriate to the aim, based on previously defined and published admission regulations. Admission regulations are reviewed and updated annually by the academic Affairs Department in cooperation with the directors of the study programmes.

RSU admission policy, matriculation procedures and criteria are implemented consistently; applicants are admitted on the basis of open and equal competition. RSU ensures equal admission



process: uniform admission regulations have been defined for all candidates with specific and previously known requirements rooted in relevant national terms and conditions and legal principals. In this way, the rights of the most suitable applicants to study the study programmes chosen by them are ensured. RSU fulfils its obligation to accept the documents submitted by applicants and to decide on their compliance with the requirements referred to in annexes to these admission regulations. RSU also announces the admission results in accordance with the provisions of the admission regulations and organises signing of study contracts with the applicants who have won the competition. After conclusion of the study contracts and fulfilment of the defined applicant's obligations, RSU ensures the matriculation of these applicants.

Recognition of qualifications is based on cooperation with other institutions of higher education, quality assurance agencies and national ENIC/NARIC Centre (academic information Centre) in order to ensure harmonised nationwide recognition of qualifications.

RSU has successfully organised its work with one Commission, ensuring the involvement of the respective expert from the relevant thematic area of education. Such an approach (one Commission for all thematic areas of education) has ensured a uniform approach throughout the university, no different interpretation is developed, thus providing equal attitude to persons.

It should be emphasized that the membership of the recognition commission includes a student delegated by the student copuncil, thus fully ensuring student participation in decision-making.

Attached:

Annex 24.2. A statement that the higher education institution will provide opportunities for students to continue their studies in another StP or at another higher education institution (a contract with another accredited higher education institution or college) if the implementation of the StP is terminated.

Annex 24.3. A document attesting that the institution of higher education guarantees the compensation for losses to students if the study programme is not accredited or the licence for the StP is withdrawn due to the action of the higher education institution or college and the student does not want to continue studies in another StP.

Annex 24.8. Study contract sample

#### **2.1.5. Assessment of the methods and procedures for the evaluation of students' achievements, as well as the principles of their selection and the analysis of the compliance of the evaluation methods and procedures with the aims of the study programmes and the needs of the students.**

Students may familiarise themselves with the criteria, conditions and binding procedures for the assessment of students' academic performance in the Academic Regulations I (available in [Latvian, English](#)). Requirements for defining and evaluating learning outcomes – knowledge, skills, competence – are included in the Process Description No 6 "Evaluation and Submission of Learning Outcomes" (links to documents are available in Annex 1).

Methods of assessment of student performance and achieved learning outcomes, as well as assessment criteria for completion of study courses, are defined in the description of each study course and are available to all students prior to the start of the study course. The academic freedom of each lecturer is respected in the implementation of the study courses, including the

development and implementation of study examinations, at the same time providing that the teaching and examination methods are chosen in accordance with the learning outcomes to be achieved in the study course. In order to ensure that the methods, procedures and principles of student performance assessment are in line with the aims of the StP and the needs of students, the quality of study courses is regularly monitored within the framework of the StP, involving both course lecturers, directors of StPs and RSU study process support departments, in this case RSU Centre for Educational Growth or Academic Affairs Department review and approve study course descriptions, as well as employer and student representatives, including in the Study Quality Council. Within the framework of this cooperation and information exchange, both the observation of teaching and the experience-sharing workshops for the teaching staff and Directors of StPs are organised and the mapping of StPs is done during which particular attention is paid to close links between the learning outcomes of study courses and the learning outcomes of the StP. The assessment methods used in study courses are discussed between the teaching staff and students, evaluating the relevance of the methods to the aims of the StP. During the annual updating of study courses, best practices are taken over and used further. At the same time, the assessment methods used in the study courses are reviewed taking into consideration the results of the course evaluation survey, in which a special section is devoted to assessment methods.

Both summative and formative assessment are combined in the study process to enhance students' individual performance and assess the level of learning outcomes achieved. In the context of learning outcomes, both study course-specific and transversal knowledge, skills, and attitudes are important, therefore, students' active involvement and participation, initiative, and taking responsibility are additionally evaluated. Individual assessment of interim and end-of-course examinations are available to each student on their student profile in RSU e-learning environment.

Creative, research, practical and self-reflective works are assessed in accordance with the aims of each study course and the evaluation criteria of the course which the lecturer introduces to the students at the beginning of the course. The criteria for research papers are available in the methodological guidelines for research papers, which were improved and updated in 2020 for both Bachelor and Master students (information [in Latvian](#), [in English](#)).

Supervision of the implementation of study courses (including assessment methods and procedures) at the **Faculty of Rehabilitation** (RF) involves students (evaluation of study courses at the end of each semester, discussions with the course leader with reflection elements at the end of study courses) and course lecturers (discussions with students with reflection elements at the end of study courses, analysis of study course evaluation questionnaires), Head of the Department of Rehabilitation and Directors of the StPs (mapping of the study programme, analysis of study course evaluation questionnaires, analysis of student progress), as well as the StP Quality Councils and the Faculty of Rehabilitation Council (summary of the analysis of study course evaluation questionnaires, analysis of academic achievements). In addition, opportunities such as support from RSU Centre for Educational Growth (PIC)(training offered by PIC to teaching staff, experience exchange seminars and individual counselling) and peer observation of study courses may be used. (Head of the Department of Rehabilitation, Directors of the StPs, teaching staff). Employers who are involved in both the RF Council and National Examination Boards, take part in evaluation of the learning outcomes of RF study programmes.

When starting their studies, the students of **Liepāja branch** are acquainted with the criteria for assessment of learning achievements, the possibilities of improving the assessment and the regulation of the process prescribed by the Academic Regulations I. This process is supervised by the directors of study programmes and study course leaders, as well as the support staff - the study process coordinator, office manager and the Director of the branch. The study courses are regularly updated in the study process, new methods are included, as well as evaluation criteria are revised.

Teaching staff regularly extend their knowledge and skills in improving the study process in the training offered by the Centre for Educational Growth.

Employers who are involved in both the **Faculty of Pharmacy** (FF) Council and National Examination Boards, take part in evaluation of the learning outcomes of FF study programmes. Employers' recommendations regarding changes in the assessment of National Examinations have been taken into account and the changes have been introduced. For example, in the development of evaluation criteria for the objectively structured clinical examination in pharmaceutical care, changes in the structure of pharmacology and pharmacotherapy examinations.

The evaluation procedure of the Residency study programme at the **Faculty of Residency** is described in the Academic Regulations II Academic Regulations for Residency Studies, available [here](#) (Latvian only).

An essential element of the assessment system in residency is interviews between a medical resident and the Director of the specialty programme, organised at least twice a year by the Director of the specialty programme. As part of this, the Director of the specialty programme listens to the resident's self-assessment regarding the training process, discusses and assesses the progress of the acquisition of the study programme (progress of the achievement of learning outcomes), positive aspects and potential problems. The result of the assessment and recommendations for the next stage are recorded in the Resident's book.

For the **Faculty of Public Health and Social Welfare and Liepāja branch**, as well as for other faculties and their study programmes, the rules for organising examinations and the assessment system of studies are prescribed in RSU Academic Regulations I, that students are familiarised with when they start each study course. Assessment criteria for specific study courses are specified in the course descriptions. In order to successfully master the study programme, it is necessary to obtain a successful assessment of the acquisition of the entire content of the study programme, which consists of a successful assessment for each study course. The heads of the departments present the summary of the analysis of study course evaluation questionnaires with conclusions about the study courses implemented by the respective department in the Faculty Council, the analysis of the students' academic performance is also considered in the Faculty Council.

Doctoral study programme of the **Department of Doctoral Studies** can familiarize themselves with the criteria, conditions and binding procedures for the assessment of students' academic performance in "Academic Regulations III. Academic Regulations for Doctoral Studies" (available in [Latvian, English](#)). Evaluation of doctoral examinations and scientific activity of doctoral students is described in the Process description No 44 "Assessing doctoral examinations and scientific activity of doctoral students".

Assessment criteria for the completion of the study course are defined in each doctoral study course description Study course descriptions are available to doctoral students before starting the study course. The academic freedom of each lecturer is respected in the implementation of the study courses, including the development and implementation of study examinations, at the same time providing that the teaching and examination methods are chosen in accordance with the learning outcomes to be achieved in the study course.

As an example, RSU **Faculty of Medicine** may refer to the conduct of the National Examination "Clinical Medicine", in which the Chairperson of the Board is a representative of employers, while one of the Vice-Chairpersons of the Board is a visiting professor P. Goreckis of the Charité Clinic in Germany. It ensures independent assessment of the knowledge and competences of the faculty students and their compliance with employers' and international requirements. The National Examination consists of three parts, which include both theoretical knowledge and manipulation

skills and clinical knowledge synthesis and skills assessment in a real clinical environment at the patient bedside. At all stages of the knowledge skills, the scope of requirements and the components of the overall assessment are clearly defined. This is necessary to ensure completely equal assessment criteria regardless of the evaluating lecturer, to exclude subjectivism and, if necessary, to provide the student with accurate feedback on how the assessment was formed. For example, in assessing the examination of the theoretical part, the lecturer follows the previously set criteria, which reflect what content should be included in the student's answer and according to which criteria the assessment is formed. It should be added that only the content that is included in the materials of the corresponding study course and has been defined as being learned by the student within the respective course, is expected in the answers, to exclude the possibility that more (or less) is expected from the student than is required by the level of undergraduate studies

It should be noted that after each National Examination, a meeting on the progress and analysis of the results is convened with involved teaching staff and student representatives participating, listening to suggestions and making corrections.

In rotation placements during the 6th year of study, a Portfolio is created containing a uniform summary of practical work, which includes the findings, skills and abilities acquired during the rotation placement, and based on which the student's professional development is evaluated by the placement supervisor. The Student's Portfolio provides an opportunity for the student to self-assess their work and skills and to evaluate their progress, but the placement supervisor to follow the student's professional and individual growth and progress. The assessment for the final examination on the rotation placement is cumulative: 50% of it consists of the assessment for the practical part in the medical institution by the placement supervisor and 50% is the assessment for the defence of the Rotation Placement. There are precise instructions for both the lecturer and the placement supervisor regarding the assessment criteria, which are described and available to students as well. See Annex 9 for more information on placement, including assessment for the placement.

**2.1.6. Description and assessment of the academic integrity principles, the mechanisms for compliance with these principles, and the way in which the stakeholders are informed. Specify the plagiarism detection tools used by providing examples of the use of these tools and mechanisms.**

RSU has developed RSU Code of Ethics ([in Latvian](#), [in English](#)) and established the Ethics Committee ([in Latvian](#), [in English](#)) that considers violations and cases of disputes on the basis of applications. RSU has developed and approved the document "Methodological Guidelines for Citing References and Compiling Bibliography" ([in Latvian](#), [in English](#)), which explains to students the principles of using the works of other authors and making proper references. In order to promote academic integrity and to make it easier for lecturers to check student works, RSU has introduced and uses the Unified Computerised Plagiarism Control System of Latvian higher education institutions to check the originality of the content of final theses, and RSU has purchased a license for the content originality checking tool *Turnitin* for wider use. For easier use, the tool is integrated into RSU e-learning environment. Example of application: all the coursework prescribed, as well as all final papers and individual course reports must be submitted in e-learning at the relevant study course where it is requested to upload papers to *Turnitin*. After the papers are uploaded, the results on the plagiarism (matching) of the papers are available on e-learning, which show both the overall percentage of similarity and visually demonstrate matching places in the paper itself, identifying

also the sources used that match some part of the text. Supervisors of the coursework assess the results of similarity, taking into consideration also the *Turnitin User Guide* for academic staff developed by RSU (available only in [Latvian](#)), which sets out the principles for interpreting the results (page 7 of the manual). Taking into consideration these results, the supervisor of the respective work evaluates whether the work submitted complies with the principles of academic integrity and makes an assessment accordingly or informs the student if the work needs to be corrected. The evaluation of *Turnitin* results takes into account that a relatively high (above 20%) similarity with other sources may not mean that the submitted work shows signs of plagiarism, but indicate a lack of contribution from the author, namely the author has used other sources of information and correctly referred to them, but the work lacks the author's analysis, argumentation and interpretation, which the supervisor also points out to the student when giving the assessment or returning the work for correction.

In order to improve the lecturers' knowledge of the possibilities of this tool and to develop the skills for using it, RSU Information Technology Department (ITD) and PIC regularly organise practical training for lecturers and support staff on the benefits and use of this tool for checking, correcting students' independent work and providing feedback in the study courses, as well as for checking qualification and diploma papers at the end of the StP. Lectures and seminars on the principles of academic integrity and mechanisms for their observation and checking are also provided to students during the study process.

Introduction of academic integrity in the programmes of the study direction Health Care:

- students at all levels learn basic principles of academic integrity, e.g. in the study courses on research at the **Faculty of Rehabilitation**, and the study courses at the **Faculty of Pharmacy** "Introduction to Pharmacy", "Pharmaceutical Chemistry", "Research Project", etc.
- It is the responsibility of the Directors of StPs to inform about the principles of academic integrity and the procedures for prevention at RSU (consideration of plagiarism cases in department meetings, maintenance of a plagiarism register, recording each case; risk of exclusion in cases of repeated plagiarism). There have been only two such cases at the **Faculty of Rehabilitation**. The **Faculty of Public Health and Social Welfare** promotes academic integrity not only by updating the basic principles of RSU Academic Integrity Policy in the study courses implemented by the departments of the Faculty of Public Health and Social Welfare, but also by analysing issues related to academic integrity in the meetings of the Faculty of Public Health and Social Welfare Council;
- all final papers (semester papers, Bachelor's theses, Master's theses) are uploaded to the e-learning site and checked with the help of the *Turnitin* tool;
- most of the coursework of the study courses are also checked with the help of the mentioned tool;
- regular consultations with RSU Student Union on issues of academic integrity take place.

In addition to the mechanisms for monitoring and implementing academic integrity specified in the higher education institution, **medical residents** are subject to the Code of Medical Ethics. Such a document, which defines the basic principles of professional ethics and general norms of behaviour of a resident as a doctor in order to promote lawful and honest work in the public interest, is established in virtually all medical institutions (e.g., [Children's Clinical University Hospital](#), [Riga East Clinical University Hospital](#)) and is binding on residents who carry out their studies in a medical institution.

The basic principles of medical ethics are also addressed and discussed at seminars of several specialties (e.g. paediatrician, psychiatrist, psychotherapist).

The **Faculty of Dentistry** specifically marks examination materials in practical examinations to rule out cheating on the work done. Individually marked moulage teeth are given to for test work and examinations taking place in the pre-clinic in order to prevent any possibility of cheating. The work of a particular student with the particular patient is individually assessed at the clinic.

The principles of academic integrity set out in RSU regulatory documents are binding on **Liepāja branch**. The available anti-plagiarism tools provided by the University are regularly used. Adherence to the principles of ethics and academic integrity is promoted in both face-to-face and remote study process, involving students, lecturers and administrative staff. The Principles of Academic Integrity are updated annually.

The **Department of Doctoral Studies** informs doctoral students about RSU Academic Integrity Policy upon commencement of their studies.

Students of the **Faculty of Medicine** are informed about the principles of academic integrity even before starting their studies in the medical programme, i.e. at the student familiarisation day organised by the faculty before the beginning of the first year of study. As well as on the day of matriculation. Before the beginning of each study course, the departments of the Faculty of Medicine explain the expected principles of academic integrity in the particular study course, as well as the regulations are available in the e-learning environment of these study courses. The management of the Faculty of Medicine reminds the students of RSU Academic Integrity Policy at each joint meeting with the student stream.

In order to promote a unified approach to the definition, detection, handling and sanctioning of academic integrity violations across the University, RSU has developed a **plan for the establishment and implementation of a framework for a culture of academic integrity and compliance with its principles**. This initiative is included in the draft project application of the Ministry of Education and Science Specific Support Objective 8.2.3. "To ensure better governance in higher education institutions".

Within the framework of the development of a support system, the main planned activities are:

- promoting prevention. Preventive promotion of compliance with principles of ethics and academic integrity is envisaged by developing online study courses in e-learning environment, face-to-face studies, and discussions at the university, educational self-learning materials, self-assessment tests. Three main target groups have been specified for the activity of the action: students, academic staff, and research staff; in addition, promotion of competence of the administration on principles of ethics and academic integrity is envisaged;
- improvement of the internal system It is planned to develop and improve RSU internal regulations that will allow to classify the definition and implementation of ethics and common principles of academic integrity management for students, lecturers and scientific staff. It is intended to define types of violations, develop processes and procedure for consideration of violations, as well as determine the applicable sanctions in accordance with the type of violation and the situation, thus promoting transparency and consistency in decision-making. Plans have been made to establish a new centralised committee that would participate in the alignment of the internal system by developing and approving procedures and regulatory framework so that it is adapted for consideration of violations of academic integrity by all students of the university and the unified committee is able to make a decision appropriate for each situation according to unified approach and system for students of all faculties, thus ensuring proportionality of decisions, compliance thereof with the internal regulatory framework and consistency. Involvement of a change agent has been envisaged for the implementation and application of this activity.

Involvement of a competent and experienced external expert for the implementation of a high-quality system of ethics and academic integrity has been planned in order to consult regarding defining of unified principles and alignment of regulatory framework, as well as the implementation of prevention mechanisms

In order to promote alignment of basic principles of ethics and academic integrity and compliance with these principles in Latvia, cooperation with several Latvian higher education institutions has been intended, providing for intellectual cooperation in the establishment of principles and development of materials, sharing of the developed resources with other higher education institutions (e-study courses, training materials), as well as further cooperation to promote ethics and academic integrity and to solve problematic issues at the national level. At present, RSU has signed a strategic partnership statement with RSU Red Cross Medical College, the University of Latvia and Riga Technical University. So far, other higher education institutions have also agreed to cooperate to harmonise ethical and academic integrity principles; to develop teaching materials on the sharing of the academic integrity module; to exchange experience to introduce best practices in ensuring academic integrity; and raise the issue of academic integrity at national level.

Additional information on RSU involvement in matters related to academic integrity:

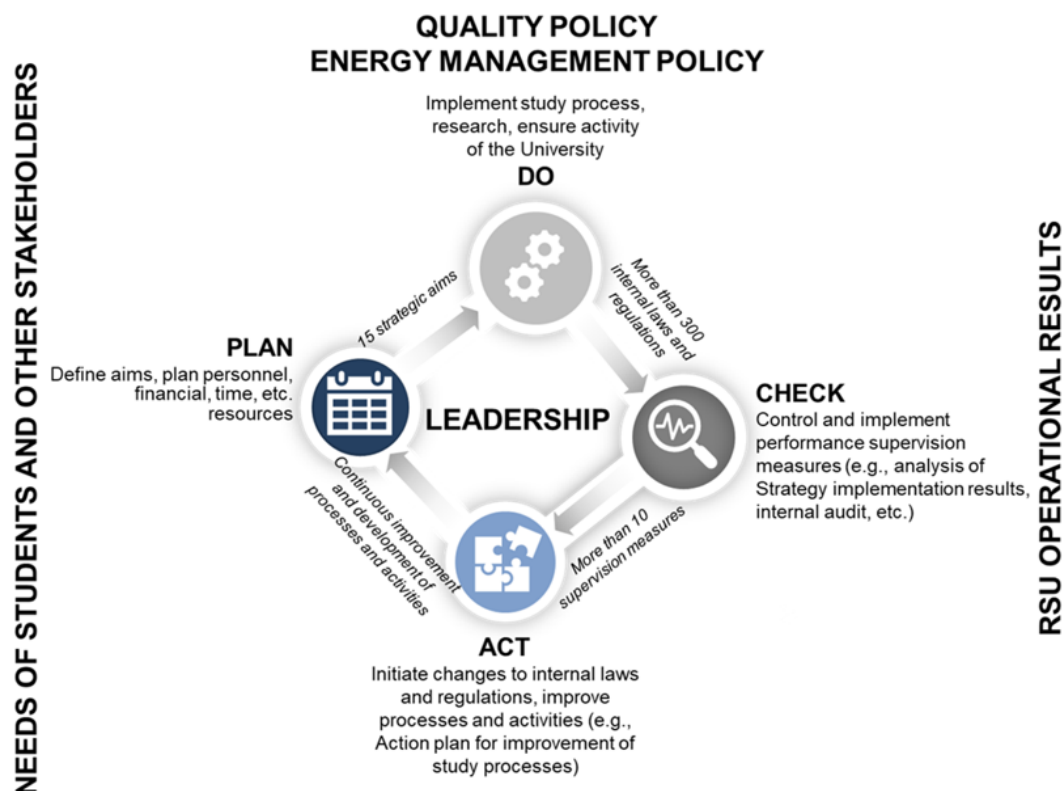
- Article 05.03.20219. “Integrity is an Integral Part of Academics” of 05.03.2019 (available in [Latvian](#), [English](#)).
- Article “Seminar “Academic Integrity and Ethics in Higher Education” was Held” of 15.11.2019 (available only in [Latvian](#)),
- RSU Academic Integrity Policy (available in [Latvian](#), [English](#)).

## **2.2. Efficiency of the Internal Quality Assurance System**

**2.2.1. Assessment of the efficiency of the internal quality assurance system within the study field by specifying the measures undertaken to achieve the aims and outcomes of the study programmes and to ensure continuous improvement, development, and efficient performance of the study field and the relevant study programmes.**

The Deming Cycle of plan - do - check - act (See Figure 5) is applied in the introduction and implementation of the internal quality system.





*Figure 5 Implementation and application scheme of the internal quality system*

In general, supervision of RSU activity is ensured by carrying out activities that are integrated into everyday activities, such as assessment of work quality, distribution of duties and responsibilities, coordination of documents. At the same time, targeted control measures have been introduced, which are implemented at different periods throughout the year.

Requirements for planning, supervision, and quality control of the study process at RSU are set by Process Description No 35 “Planning and Administration of the Study Process” (see Annex 1, No. 4.5.). Requirements for defining and assessing learning outcomes – knowledge, skills, competence – are included in the Process Description No 6 “Assessment and Submission of Learning Outcomes” (see Annex 1, No. 4.14.) and [Academic Regulations I](#).

In order to ensure the supervision of the quality of studies, once a year an evaluation of study directions is carried out, a study programme review and a development plan/review of the study direction are drawn up, as well as a plan/review for the implementation of the recommendations put forward by external evaluation experts. The programme review should include an analysis of the StP quality indicators (approved in 2016).

Directors of StPs compile and evaluate the quality indicators of the StPs in accordance with the document “Procedure for the evaluation of the quality indicators of the StP” (available only in [Latvian](#), see Annex 1, No. 5.5.) and include the results into the StP reports. Data analysis related to studies, including analysis of the academic performance, analysis of the results of study course surveys, analysis of class observation results, and other measures are also performed.

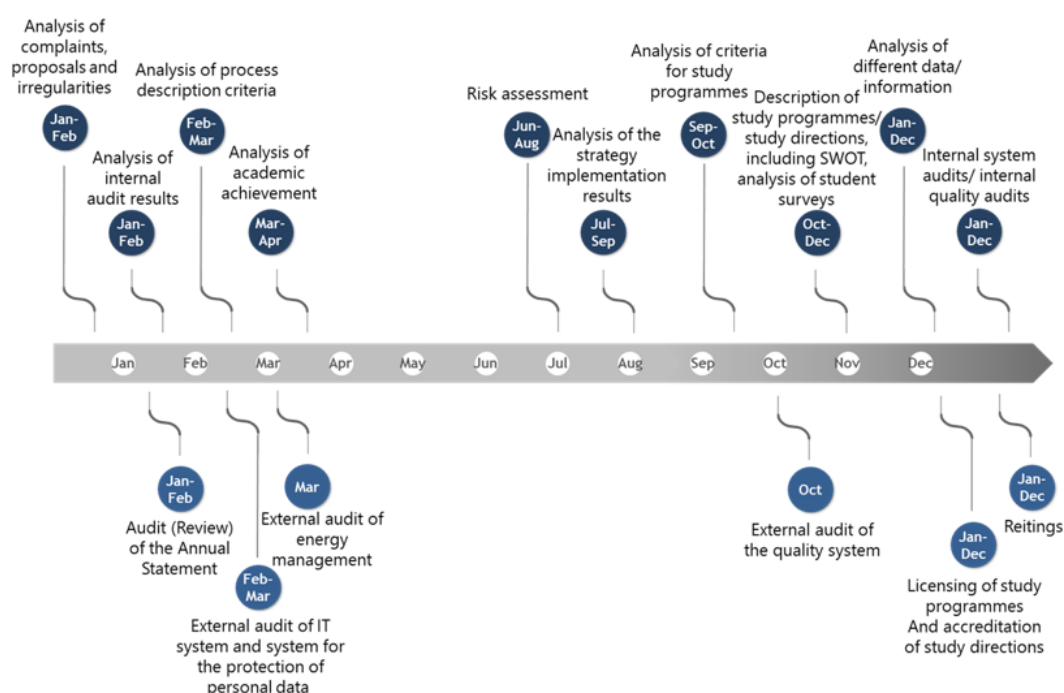
To ensure the supervision of the processes taking place at the University, an analysis of the fulfilment of process quality criteria is carried out once a year. For example, one of the criteria in Process Description No 6 “Evaluation and Submission of Learning Outcomes” is: “The entry of assessment for mid-semester examinations and end-of-course examinations in e-studies is ensured in the following time periods:



- within one working day for oral examinations;
- no later than six working days (or until the beginning of the examination period, if the period before the examination period is shorter - in the study system of regular classes) for written mid-semester examinations;
- for written end-of-course examinations - no later than six working days."

The results are reported at the management meeting – the Rectorate, where decisions are made regarding future activities.

The existing system ensures comprehensive supervision of study quality with control measures throughout the year.



**Figure 6. Internal quality control measures**

Summarising what has been stated above about internal quality monitoring, it should be noted that the internal quality audit is performed:

- 1) at the institutional level - monitoring of the quality strategy, participation of RSU (including the Health Studies field) in ratings, financial monitoring, monitoring of energy saving in structural units of the field of study, data protection quality analysis;
- 2) measures at the level of processes – analysis of complaints and non-conformities review processes, success analysis, risk analysis;
- 3) at the level of study programmes – study quality analysis, study programme and SWOT analysis, plan evaluation, analysis, etc.
- 4) at the level of analysis of structural units – analysis and audit of the level of academic activity of structural units, analysis of student surveys and feedback analysis.

The mentioned measures ensure multi-level audit and periodic and systematic assessment of work quality. Both the quality control steps organized by RSU and the students' own participation in the processes, such as participation in survey processes, Student Union initiatives and participation in ensuring the quality of studies, are of significant importance.

**2.2.2. Analysis and assessment of the system and the procedures for the development and review of the study programmes by providing specific examples of the review of the study programmes, the aims, and regularity, as well as the stakeholders and their responsibilities. If, during the reporting period, new study programmes have been developed within the study field, describe the procedures of their development (including the process of the approval of study programmes).**

The standards set out in Part 1 of the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) described in Annex No 23.1 are followed in the implementation of studies at RSU.

RSU has established the procedure for development and internal approval of StPs, supervision of their operation and periodical inspection. These requirements are determined in the Regulations for Development and Approval of New StP at Rīga Stradiņš University and in detail - in Process Description No 34 "Updating and Development of Study Courses, Study Programmes, Study Directions" (a link is available in Annex 1) in accordance with the requirements of external laws and regulations. Necessity, usefulness, and compliance of a new StP to the set aims are evaluated by the Centre for Educational Growth and the Vice-Rector for Studies, whereas the licensing documents of the developed StP, as well as accreditation documents and documents for implementation of changes are coordinated by several RSU structural units and collegial institutions, including the Study Quality Council, Faculty Council, Council of Deans, Rectorate, and Senate. Supervision over the implementation of a StP and its quality is ensured by the director of the study programme by evaluating the study process, learning outcomes, analysing the results of student surveys, changes to the trends in the labour market, and current events in the sector and world. Several administrative departments are also involved in monitoring the quality of studies, including the Centre for Educational Growth (information [in Latvian](#), [in English](#)), the Academic Affairs Department (information [in Latvian](#), [in English](#)), the Human Resources Department (information [in Latvian](#), [in English](#)), the Quality Assurance and Internal Audit Department (information [in Latvian](#), [in English](#)).

The development and approval of the StP prior to submission to the Quality Agency for Higher Education (AIKA) include a sequence of activities carried out by the developer of the StP (usually also the Director of the StP) in cooperation with the Study Programme Development Project Manager of the PIC, who carry out informative, supervisory, coordinating and organisational functions, provide the necessary support during the programme development, as well as the content creation and content expertise functions listed in paragraph 1.2 "Programme development and approval" of the Annex 23.1 ( Compliance of the study programme with Part 1 of the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG), information in [Latvian](#), [English](#)).

**Annual revision process of StPs and study directions** is regulated by the Rector's decree or the instructions by the Administration of Studies, and its goal is to prepare a summary of the annual study process quality monitoring. For more information see paragraph 1.9 of Annex 23.1 "Programme monitoring and regular review"

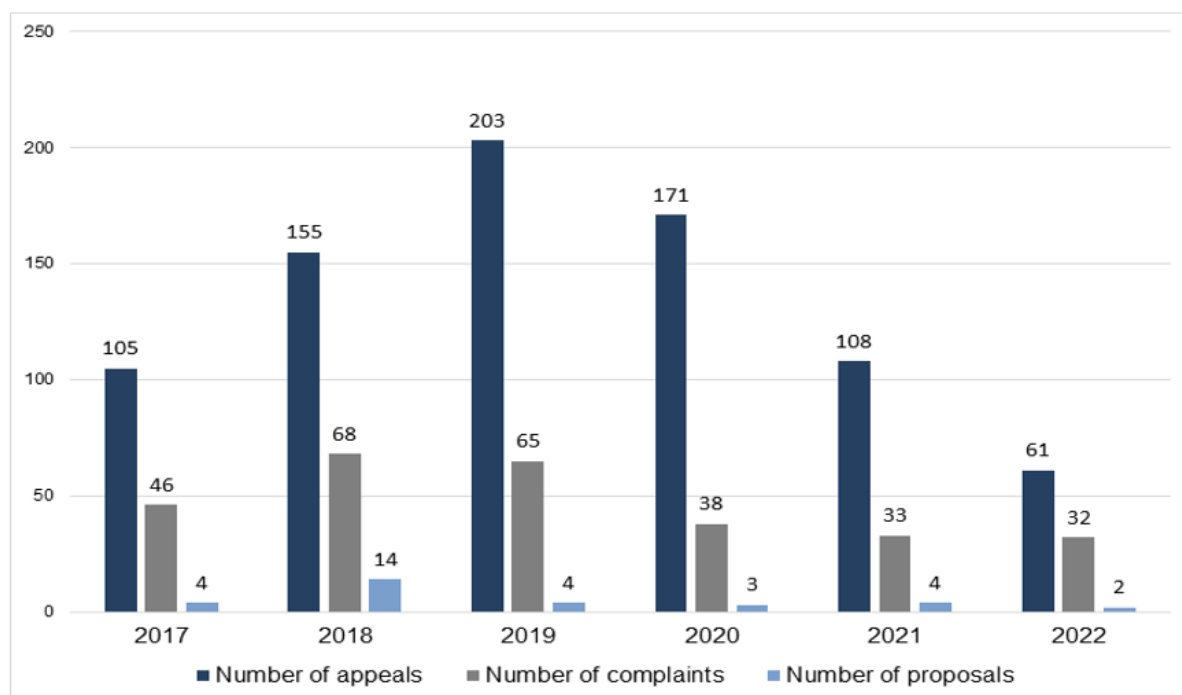
The annual report of the study direction "Health Care" is drawn up in accordance with the aforementioned procedure for the annual review process of StPs and directions. Programme directors and members of the Quality Council of the study direction participate in the preparation of the report on the study direction. The report includes an analysis of the significant development indicators of the StP and the learning outcomes to be achieved, as well as the development plan for

the study direction.

In 2019-2021, the review of the StP content and the optimisation of study courses was implemented in the StPs of the Faculty of Rehabilitation and the Faculty of Public Health and Social Welfare. It focused on reducing fragmentation of study courses, sharing resources and strengthening the cost-effectiveness of the programmes.

**2.2.3. Description of the procedures and/or systems according to which the students are expected to submit complaints and proposals (except for the surveys to be conducted among the students). Specify whether and how the students have access to the information on the possibilities to submit complaints and proposals and how the outcomes of the examination of the complaints and proposals and the improvements of the study field and the relevant study programmes are communicated by providing the respective examples.**

Procedure for submission and review of student complaints and proposals is defined in Process Description No 31 "Management of Complaints, Appeals, Non-Conformities and Proposals" (see Annex 1, No. 20.2.). Additional requirements for submission and consideration of appeals are set out in the Academic Regulations I. In accordance with the internal procedure, students may submit complaints to the Student Services, Student Union and Quality Assurance and Internal Audit Department. These structural units ensure registration of complaints and proposals, and transfer them for consideration to the responsible structural unit. After the complaint/proposal has been assessed and corrective actions have been taken, the submitter of the complaint is informed in writing regarding results of the review and the actions taken. Once a year, the information on all complaints/proposals received is compiled, and the results are included in the document "Report on the Quality Management System". The information is taken into consideration when carrying out RSU risk assessment. Information on the possibilities for students to submit complaints or proposals is available on RSU website in [Latvian](#) and [English](#) and on the Student Portal. See Annex 23.1, Paragraph 1.3 "Student-centred learning, teaching and assessment" for more information.



**Figure 7. Total number of complaints and appeals registered at RSU from 2017 to 2022.**

In 2022, 32 complaints, 61 appeals and two proposals were registered in the structural units. Compared to the previous year, there were no significant changes in the number of complaints and proposals. Evaluating the content of these complaints, it was found that most complaints were related to the implementation/quality of the study process (16 complaints), knowledge assessment process (6 complaints) and technical provision in auditoriums (3 complaints). Although most complaints concern the implementation of the study process, compared to the previous year, the number of complaints decreased by seven complaints (there were 23 complaints in 2021).

In 2022, the number of appeals decreased by 47 units compared to 2021. In the reporting year, there were changing trends in the structural units where appeals were registered. The Faculty of Medicine had the highest number of appeals (17 appeals) and the Faculty of Dentistry (12 appeals) and the Department of Biology and Microbiology (12 appeals). There are several structural units where no appeals were lodged in 2022, such as the Department of Morphology, the Department of Pathology, etc.

In order to improve cooperation with students, the following mechanisms have been introduced in the course of studies:

1. In every department that operates in the study direction, it is possible to submit a student's complaint, proposal or suggestion, which must be considered and a written response must be given to the student; in case of academic claims, for example, in the case of appeals, they must be considered by the head of the department or other lecturers in accordance with the process descriptions;
2. Telephone numbers and e-mail addresses are placed in the e-studies environment, which can be used for direct oral communication with department staff on any academic issues;
3. Students' submissions are also accepted, registered and delivered to the addressee for consideration by the Student Service - in person or electronically;
4. Faculty deans, vice-deans, teaching specialists periodically meet personally with course and semester leaders - course or semester seniors, etc. for students. Actualities, innovations, problematic topics are proactively discussed.
5. Each faculty is headed by the Faculty Council. According to the procedure approved by RSU,

20% of the composition of the council are students; during council meetings, students participate in discussing important issues for the faculties and making decisions;

6. Similarly, the Council of Deans includes representatives of the Student Union, who actively discuss issues of particular concern to students; in general, the Student Union is an essential institution representing the students' opinion, which works very actively and constructively at RSU;
7. Also, the head of the study direction periodically meets with the representatives of the students in order to jointly examine problematic issues and agree with the students on important issues affecting the academic life of the students;
8. Since the spring semester of 2023, mandatory questionnaires have been introduced after the completion of each course; the said decision was made in cooperation between the RSU administration and the Student Union; it is aimed at clarifying the students' opinion about the quality of the study process and cooperation in its improvement; in this case, the lecturers' duty is to provide a link, opinion or describe the action that will follow the improvement of quality in case of objective necessity

**2.2.4. Provide information on the mechanism for collecting the statistical data, as developed by the higher education institution/ college. Specify the type of data to be collected, the regularity of collection, and the way the information is used to improve the study field. Describe the mechanism for obtaining and providing feedback, including with regard to the work with the students, graduates, and employers.**

RSU has developed a system for centralised collection and analysis of key data related to the study process. The system has a clear division of responsibilities for data analysis at various levels (RSU institutional level, study direction and programme levels, faculty and academic structural unit levels and study course level), drawing conclusions and providing feedback on the changes planned and implemented in the study process as a result of the analysis. To ensure data integration, data from different RSU information systems are periodically automatically backed up in a data storage room, where information can be analysed in different ways, integrating data from different disciplines. RSU collects data on general statistical indicators characterising the higher education institution, such as the number of students, student success rate, drop-out rates and its causes, as well as admission results. Key performance indicators have been developed and are periodically measured and monitored, and in-depth analysis of key indicators is ongoing.

Every month, RSU collects the most up-to-date data on the number of students, including student status (active, inactive), type of tuition financing (state-funded studies, studies for tuition fee). Information about the reasons for student drop-out is collected, compiled, and analysed, which is used to identify necessary improvements in the StP.

Data on admission results - the number of individuals enrolled in a particular StP and the total number of applications is collected, keeping track of the demand for the StP. The number of students admitted to the StP is also collected.

Data on the use of the e-learning environment is regularly collected to monitor the content and quality of e-courses, to identify shortcomings and support lecturers in improving the e-learning environment.

The obtained statistical data are used to improve the StD, for example, in the following ways:

- The number of applications for studies, including by programmes, is used to assess the awareness of the StD and its StP. In case of a decrease in the number of applications, possible reasons are analysed and changes are made to the StP and/or the publicity activities of the StP are strengthened.
- Statistics on study application priorities are used to identify opportunities for interdisciplinarity in the offer of the StPs.
- Study applications by regions and secondary schools are used to improve publicity activities in certain regions and secondary schools in the next period.
- Statistics on the number of study contracts concluded/students enrolled are used both for a more objective assessment of the number of applications in the future periods and, of course, for the analysis of student dynamics, which affect many other indicators (drop-outs, the number of graduates, the number of state-funded study places, publicity activities).
- Statistics on academic achievement are used to analyse both the dynamics of the level of skills of students and the relevance of study courses to the needs of students, as well as to identify possible changes in the study course assessment system and the structure of content and learning outcomes, and possibly in the teaching the course in general.
- Drop-out statistics is analysed especially in the 1st year and during the programme period. Drop-out statistics together with the reasons for dropping out are used to identify possible differences in the demand and supply of higher education, to analyse the gap in students' expectations and to facilitate the communication of the teaching staff, directors of the StPs and support departments and students about the reasons for dropping out (for example, various options for paying tuition fees, possibilities of having individual tutorials during studies, etc.). The drop-out statistics are also analysed during the overall programme period along with the graduate statistics, which are used both in the publicity activities of the programme and in the overall assessment of the complexity and relevance of the programme.
- Statistics on the number of graduates are analysed together with the statistics on drop-outs of the overall period of the programme and are used in the publicity activities of the programme and in the assessment of the overall quality and relevance of the programme.
- Statistics on the types of tuition fee payment (loans, sponsorships, grants, own finances) are taken into account to a large extent together with the analysis of drop-out and its causes, used in communication with students to reduce drop-out risks and in publicity activities of programmes, as well as in cooperation with support departments in the management of programmes, for example by setting payment schedules, possible discounts, tuition fees.
- Status of study course descriptions - information about the status of study course descriptions is analysed to ensure regular updating of study courses, including updating of the literature and other sources given in the study course description.
- Results of study course evaluation questionnaires are used for the review of study courses and for evaluation and updating of the management of study courses every semester.
- Statistics on the causes of leaving studies are analysed together with dropout statistics to minimise the dropout risks, eliminating the reasons for leaving studies as much as possible. For example, the most common risks during the study process are academic and related to the study plan (motivation, combining with work, complex content, etc.), as well as financial, related to difficulties of paying tuition fees.
- Statistics on the number and qualification of the teaching staff are used to assess the compliance with regulatory requirements of programmes, publicity activities, identification of programme quality and strengthening of lecturer qualifications, financial calculations of the study process, etc.
- Distribution of types of lecturers' work - information on types of lecturers' work is analysed in order to plan the staff development of academic departments and to balance the

pedagogical, research and methodological work of lecturers.

- Completion of E-studies: the completion of the e-learning environment (study materials and activities available to students, activity of the use of content, etc.) is analysed in order to identify and eliminate deficiencies in the availability of digital learning materials and activities and to provide support to teaching staff.

### **Mechanism for obtaining and providing feedback in work with students and graduates**

Student surveys are organised centrally at the higher education institution twice per academic year. Students fill in an anonymous electronic questionnaire for each study course completed in the semester, in which the content, results and organisation of the study course are evaluated, as well as the work of the teaching staff evaluated. The survey results are available to all lecturers, as well as Heads of departments and programme directors in an aggregated form on RSU academic portal (available only [Latvian](#)). It is the responsibility of each study course leader to familiarise themselves with the results of the course survey and provide students with structured feedback on the identified strengths and weaknesses of the course, as well as the planned improvements to the study course, if any. The course leader submits the feedback to RSU academic portal and it is automatically published on the student portal MyRSU and on the e-study course, where it is available to both students who have completed the course and to students starting the course in the following academic year. Thus, students have access to the results of the previous course evaluation when starting the study course, as well as feedback from the course leader on the planned improvements to the study course.

Once a year, students of the last year of study fill in the study programme evaluation questionnaire to provide feedback on the content and learning outcomes of the study programme. This questionnaire is also anonymous and is organised electronically, and its results are automatically compiled and published on RSU academic portal, where they are available to the Directors of study programmes, Heads of study directions and deans of faculties.

The information obtained in the surveys is analysed at all relevant levels (at the level of the University, study directions and study programmes, departments and study courses), evaluated and discussed in collegial bodies (Faculty Councils, department meetings, Study Quality Councils and Council of Deans), where the experience gained and decisions taken on necessary changes in the implementation of the study course or programme.

### **Mechanism of obtaining and providing feedback from / to employers**

Different approaches are used to get to know the employers' point of view. For example, during the reporting period from 30.07.2019 to 31.03.2020, research commissioned by RSU "Study on competitiveness and relevance of the study programmes of Rīga Stradiņš University and RSU Red Cross Medical College to the medium and long-term development trends in the labour market and sector" was carried out, which resulted in obtaining employers' opinions and recommendations, including those related to life sciences. In addition to this approach, another form of direct communication with employers is used as the number of students is small, e.g., employers as supervisors of Master's these are addressed during the development of students' Master's theses, as well as employers are involved in the evaluation of the Master's theses both as reviewers and as the Chairpersons and members of the evaluation committee. Thus, the information from employers on the quality and relevance of the study programme to the labour market, as well as their proposals for improving the programme is obtained.

## **2.2.5. Specify the websites (e.g., the homepage) on which the information on the study**

field and the relevant study programmes is published (in all languages in which the study programmes are implemented) by indicating the persons responsible for the compliance of the information available on the website with the information published in the official registers (State Education Information System (VIIS), E-platform).

**Table 2. Websites publishing information on the study direction and the relevant study programmes**

<b>Study Programme / Study direction</b>	<b>Sections of RSU website<sup>[1]</sup>, where the information on the study direction and the relevant study programmes is published:</b>
Professional Bachelor's study programme "AUDIOLOGY AND SPEECH THERAPY"	<ul style="list-style-type: none"> <li>· Information about the programme <a href="#">in Latvian</a></li> <li>· Information about the programme in English (the person responsible: Ilze Blūmentāle, Director of the StP)</li> </ul>
The first-level professional study programme "PHYSICIAN'S ASSISTANT"	<ul style="list-style-type: none"> <li>· Information about the programme <a href="#">in Latvian</a></li> <li>· Information about the programme <a href="#">in English</a> (the person responsible: Solvita Smilgzieda, Director of the StP)</li> </ul>
The first-level professional study programme "MEDICAL MASSAGE"	<ul style="list-style-type: none"> <li>· Information about the programme <a href="#">in Latvian</a></li> <li>· Information about the programme <a href="#">in English</a> (the person responsible: Dina Berloviene, Director of the StP)</li> </ul>
Professional Bachelor's study programme "OCCUPATIONAL THERAPY"	<ul style="list-style-type: none"> <li>· Information about the programme <a href="#">in Latvian</a></li> <li>· Information about the programme <a href="#">in English</a> (the person responsible: Zane Liepiņa, Director of the StP)</li> </ul>
The second-level professional higher education programme "PHARMACY"	<ul style="list-style-type: none"> <li>· Information about the programme <a href="#">in Latvian</a></li> <li>· Information about the programme <a href="#">in English</a> (the person responsible: Baiba Mauriņa, Director of the StP)</li> </ul>
Professional Bachelor's study programme "PHYSIOTHERAPY"	<ul style="list-style-type: none"> <li>· Information about the programme <a href="#">in Latvian</a></li> <li>· Information about the programme <a href="#">in English</a> (the person responsible: Māra Kuļša, Director of the StP)</li> </ul>
Professional Master's study programme "CLINICAL PHARMACY"	<ul style="list-style-type: none"> <li>· Information about the programme <a href="#">in Latvian</a></li> <li>· Information about the programme <a href="#">in English</a> (the person responsible: Inga Gūtmane, Director of the StP)</li> </ul>



<b>Study Programme / Study direction</b>	<b>Sections of RSU website[1], where the information on the study direction and the relevant study programmes is published:</b>
Professional Master's study programme "ART THERAPY"	<ul style="list-style-type: none"> <li>· Information about the programme <a href="#">in Latvian</a></li> <li>· Information about the programme <a href="#">in English</a></li> </ul> (the person responsible: Jana Duhovska, Director of the StP)
Professional Bachelor's study programme "NURSING STUDIES"	<ul style="list-style-type: none"> <li>· Information about the programme <a href="#">in Latvian</a></li> <li>· Information about the programme <a href="#">in English</a></li> </ul> (the person responsible: Eva Cela, Director of the StP)
Academic Master's study programme "NURSING STUDIES"	<ul style="list-style-type: none"> <li>· Information about the programme <a href="#">in Latvian</a></li> <li>· Information about the programme <a href="#">in English</a></li> </ul> (the person responsible: Agita Melbārde-Kelmere, Director of the StP)
The second-level professional study programme "MEDICINE"	<ul style="list-style-type: none"> <li>· Information about the programme <a href="#">in Latvian</a></li> <li>· Information about the programme <a href="#">in English</a></li> </ul> (the person responsible: Guntis Bahs, Director of the StP)
The joint professional Bachelor's study programme "MEDICAL ENGINEERING AND PHYSICS"	<ul style="list-style-type: none"> <li>· Information about the programme <a href="#">in Latvian</a></li> <li>· Information about the programme <a href="#">in English</a></li> </ul> (the person responsible: Oļegs Sabeļņikovs, Director of the StP)
Professional Bachelor's Study Programme "ORTHOTICS AND PROSTHETICS"	<ul style="list-style-type: none"> <li>· Information about the programme <a href="#">in Latvian</a></li> <li>· Information about the programme <a href="#">in English</a></li> </ul> (the person responsible: Ēriks Švēde, Director of the StP)
Academic Master's study programme "REHABILITATION"	<ul style="list-style-type: none"> <li>· Information about the programme <a href="#">in Latvian</a></li> <li>· Information about the programme <a href="#">in English</a></li> </ul> (the person responsible: Signe Tomsone, Director of the StP)
The second-level professional study programme "RESIDENCY IN MEDICINE"	<ul style="list-style-type: none"> <li>· Information about the programme <a href="#">in Latvian</a></li> <li>· Information about the programme <a href="#">in English</a></li> </ul> (the person responsible: Ilze Grope, Director of the StP)
The second-level professional study programme "INDUSTRIAL PHARMACY"	<ul style="list-style-type: none"> <li>· Information about the programme <a href="#">in Latvian</a></li> <li>· Information about the programme <a href="#">in English</a></li> </ul> (the person responsible: Baiba Mauriņa, Director of the StP)

<b>Study Programme / Study direction</b>	<b>Sections of RSU website[1], where the information on the study direction and the relevant study programmes is published:</b>
Professional Bachelor's Study Programme "PUBLIC HEALTH"	<ul style="list-style-type: none"> <li>· Information about the programme <a href="#">in Latvian</a></li> <li>· Information about the programme <a href="#">in English</a> (the person responsible: Solvita Kļaviņa-Makrecka, Director of the StP)</li> </ul>
Academic Master's Study Programme "PUBLIC HEALTH"	<ul style="list-style-type: none"> <li>· Information about the programme <a href="#">in Latvian</a></li> <li>· Information about the programme <a href="#">in English</a> (the person responsible: Anita Villeruša, Director of the StP)</li> </ul>
Professional Master's study programme "SUPERVISION"	<ul style="list-style-type: none"> <li>· Information on the programme <a href="#">in Latvian</a>:</li> <li>· Information about the programme <a href="#">in English</a> (the person responsible: Baiba Pumpiņa, Director of the StP)</li> </ul>
Professional Bachelor's study programme "NUTRITION"	<ul style="list-style-type: none"> <li>· Information about the programme <a href="#">in Latvian</a></li> <li>· Information about the programme <a href="#">in English</a> (the person responsible: Lolita Neimane, Director of the StP)</li> </ul>
The joint academic Master's study programme "NUTRITION STUDIES"	<ul style="list-style-type: none"> <li>· Information about the programme <a href="#">in Latvian</a></li> <li>· Information about the programme <a href="#">in English</a> (the person responsible: Lolita Neimane, Director of the StP)</li> </ul>
Professional Bachelor's study programme "MIDWIFERY"	<ul style="list-style-type: none"> <li>· Information about the programme <a href="#">in Latvian</a></li> <li>· Information about the programme <a href="#">in English</a> (the person responsible: Ilze Ansule, Director of the StP)</li> </ul>
Doctoral study programme "HEALTH CARE";	<ul style="list-style-type: none"> <li>· Information about the programme <a href="#">in Latvian</a></li> <li>· Information about the programme <a href="#">in English</a> (the person responsible: Ilze Konrāde, Dace Bandere, Kristīne Mārtinsone, Director of the StP)</li> </ul>
The joint academic Master's study programme "HEALTH MANAGEMENT"	<ul style="list-style-type: none"> <li>· Information about the programme <a href="#">in Latvian</a></li> <li>· Information about the programme <a href="#">in English</a> (the person responsible: Daiga Behmane, Director of the StP)</li> </ul>
The second-level professional study programme "DENTISTRY"	<ul style="list-style-type: none"> <li>· Information about the programme <a href="#">in Latvian</a></li> <li>· Information about the programme <a href="#">in English</a> (the person responsible: Andris Ābeltiņš, Director of the StP)</li> </ul>

Study Programme / Study direction	Sections of RSU website <sup>[1]</sup> , where the information on the study direction and the relevant study programmes is published:
The first-level professional study programme “DENTAL HYGIENE”	<ul style="list-style-type: none"> <li>· Information about the programme <a href="#">in Latvian</a></li> <li>· Information about the programme <a href="#">in English</a></li> </ul> (the person responsible: Egita Senakola, Director of the StP)

RSU employs a wide range of modern marketing communication tools that provide information about the higher education institution, which is a modern, open university and offers high-quality education. RSU ensures presence of the university and high-quality content in traditional and digital media, such as a website that was reconstructed in 2017; strategic work is carried out with the audience on social media, and innovative solutions for communication with young people in social media are implemented. The StP brochure has been updated with the augmented reality app *Overly*. Digital media dominate in advertising campaigns, and the effectiveness of the selected advertising channels is monitored. Advertising materials and channels are tailored to each respective target audience.

In the long term, relationships with secondary schools all over Latvia are being built, as well as opportunities for secondary school students to come into direct contact with RSU through the development of RSU Ambassador programme are offered, as well as the opportunity to attend lectures in programmes of interest, open days, tours, etc.

RSU participates in sectoral events (exhibition “School”, etc.), works with the database and e-mail marketing, develops various activities and events also for the target groups of Master’s and doctoral StPs.

The information published on the University website on the StPs corresponding to the study direction corresponds to the information available in official registers, provides all the basic information to applicants and students, and is published in all the languages that the study programme is implemented.

<sup>[1]</sup> RSU website is maintained by the Communication Department (information available in [Latvian](#) and [English](#)).

## 2.3. Resources and Provision of the Study Field

**2.3.1. Provide information on the system developed by the higher education institution/ college for determining and redistribution of the financial resources required for the implementation of the study field and the relevant study programmes. Provide data on the available funding for the scientific research and/or artistic creation activities, its sources and its use for the development of the study field.**

The revenue from the study programmes within the study direction is used for staff remuneration, taxes, maintenance of IT infrastructure, purchase of equipment and facilities and placement

expenses. In addition to the direct costs of delivering lectures and conducting classes, the study programme has to cover infrastructure maintenance costs (premises, IT solutions) and costs of other RSU common resources used in the StP (Student Services, Library, organisation of the study process, grant for the Student Union and other support and administrative functions).

The distribution of the use of financial resources among the study programs included in the study direction depends on many factors - the number of students, the equipment, and materials necessary for the study process, the size of the rooms, the size of the study groups, the number of contact hours, the proportion of lectures and practical classes, etc. Although this distribution can vary significantly depending on the content of the study programme, the highest costs in health care study programmes in general are the compensation of departments - 42.7%, overhead costs 36.9%, teaching and practice in student clinics 6.3%, fixed costs 5.6% and departmental goods and services 3.8%, the other cost sections make up 4.7%.

Extensive RSU facilities are available for teaching of the study courses, allowing for the booking of study rooms and computer classes in the common system.

External funding and internal funding are used for research.

External funding comes from participation in various EU and national programmes and initiatives: "Horizon 2020" and "Horizon Europe", the largest EU research and innovation programmes, and funding opportunities such as the Joint Programming Initiatives, international cooperation programmes, the EU Structural Funds and other programmes. From local funding initiatives: National Research Programme and Fundamental and Applied Research Programme. External funding also comes from cooperation with the private sector (commissioned research, commercialisation projects).

RSU internal programmes are actively used, which are funded from RSU resources. The funding for internal research projects is allocated during the planning of RSU annual budget. Several internal funding programmes exist: grants for doctoral students, RSU internal grants, inter-university cooperation grants, aid to certain projects from RSU Alumni Association, cooperation with Boris and Inara Teterev Foundation.

Artistic creative activities (dance group and choir) are funded from:

- RSU own funds;
- Riga City Council co-financing.

In order to promote research and help researchers at the initial stage of their careers, RSU has established incentive schemes and practices:

- RSU internal grant system (approximately 400 thousand EUR per year);
- joint RSU and Riga Technical University (RTU) grant programme for multidisciplinary research;
- grants for post-doctoral students and researchers at the initial stage of their careers (European Social Fund);
- Grants for doctoral students;
- co-financing for international cooperation networks and mobility (*Erasmus+*).

RSU purposefully works on the profitability of study programmes. The cost of study programmes per student in healthcare studies can vary significantly and is affected by various factors, such as the amount of equipment and materials needed in the study process, the amount of contact hours, the need for simulation technology, allowances for work in English and others. Every year after the end of the academic year, the financial results of each study programme are collected, an in-depth analysis is carried out and proposals are prepared for achieving the profitability of unprofitable

study programmes. For example, the number of students in groups, the number of contact hours, the proportion of lectures and classes, the intensity of occupancy of the rooms used in the study process, the usefulness of the materials and other resources used in the learning process, etc. are analysed in depth. Recommendations for ensuring the profitability of study programmes can include: revision of study fees, optimization of the study process, optimization of the size of study groups, admission every two years. If it is not possible to achieve the minimum number of students in groups or to achieve positive profitability in the long term, a decision may be made to close the study programme.

**2.3.2. Provide information on the infrastructure and the material and technical provisions required for the implementation of the study field and the relevant study programmes. Specify whether the required provision is available to the higher education institution/ college, available to the students, and the teaching staff.**

**IT support and technical provision for students and teaching staff of Rīga Stradiņš University**

**IT Service Centre**

In order to ensure continuous availability of IT resources for the study process, an IT Service Centre was established: IT support for students, administrative staff and teaching staff providing answers to questions related to RSU IT systems. The applicant may ask questions, using the IT Support System [help.rsu.lv](http://help.rsu.lv), by e-mail: [it@rsu.lv](mailto:it@rsu.lv), or by calling 67061515. Working hours are from 7.30 to 20.00 on weekdays and from 9.00 to 16.00 on Saturdays.

**WiFi**

RSU staff and students have the possibility to use the *Eduroam* WiFi network free of charge. *Eduroam* has a free service that allows you to connect to the *WiFi* network in more than 6,000 locations in over 100 countries around the world: higher education institutions, research centres, educational institutions, schools and other research and educational facilities. Students may connect to the *Eduroam* wireless network using their username and password. RSU students may also use open access computers with provided access to student IT systems and Internet resources.

**Infrastructure**

Multimedia projectors, most of which are high-resolution interactive projectors connected to a sound system, are available in 193 lecture rooms for the use of audio-visual materials for studies. A centralised management system of the multimedia equipment in lecture rooms has also been set up. Ten computer rooms with more than 200 workstations are also available for the study process, both for specific courses and for electronic examinations and other types of knowledge tests:

1. 28 hybrid lecture rooms with automatic following the conducting of hybrid lectures and classes;
2. Eight lecture rooms for more than 100 students, equipped with the possibility of conducting online lectures and classes;
3. other auditoriums are equipped with standardised equipment, which includes interactive projectors or interactive TV screens and centralised management of multimedia equipment;
4. recording room for recording high-quality audio and video content for lectures and online events, as well as for recording podcasts or audio soundtracks;

5. there is a specially equipped studio for creating interactive content. Various technological solutions are available in the studio: green screen, interactive display and the first transparent learning glass in the Baltics, which can be used to prepare more engaging and enjoyable video lectures and classes.

#### **The physical IT infrastructure of RSU consists of:**

- RSU computer network located in 23 buildings, connections thereof, with a total of 3,142 network connection ports, 323 wireless network access points, including provision of wireless network at the Halls of residence;
- RSU uses the infrastructure and resources of the Latvian Academic Network Data Centre, that is supplemented with a secondary data centre located at RSU, consisting of 48 physical servers, four dedicated disk arrays, *VMware* virtual server infrastructure with more than 200 virtual servers, backup power system, cooling, data backup copy infrastructure;
- IT hardware and system monitoring system *Nagios*, *HP IMC*, *MS SCCM* with more than 2000 monitored devices and services;
- communication platforms: *MS Teams* and *Zoom* are available to all staff members and students; *Zoom* is used as the main remote learning platform, with more than 74,900 lectures and classes held in 2022;
- *Panopto*: a video lecture recording system with more than 31,000 video recordings; an average of 30 new video learning materials are added per day and a total of more than 300,000 lessons are viewed per year;
- e-mail systems for staff: *Exchange* for staff ensuring management of the calendar and contacts; cloud service *Office 365* for students;
- *MS Active Directory*-based electronic identity management infrastructure maintenance (one username and password for all centrally maintained IT systems);
- maintenance of the file server;
- maintenance of computerised workstations and computer rooms (2,144 computers, 456 printing equipment units, scanners and other equipment);
- maintenance of classroom equipment (193 permanently equipped classrooms);
- self - service copying / printing / scanning systems.

RSU lecturers and employees have the opportunity to use the room booking system *Booker*, which is linked to the lecture and lesson planning system *Timetable*. The room booking system *Booker* allows you to find all the rooms RSU offers for the study process, view the room occupancy, including lectures and classes, as well as make room and table bookings.

The lecture and lesson planning system "*Timetabler*" is a cloud-based service that provides an opportunity to schedule academic events for students and lecturers in a fast and efficient way.

The system provides the following functionalities:

1. Checking rooms, lecturers and students to avoid event clashing;
2. An automatic event scheduling solution *Autosheduler*;
3. Drawing up detailed reports;
4. Integration with the *O365* calendar solution.

Specialised training rooms are available for the study programmes of **the Faculty of Rehabilitation** at RSU Medical Education Technology Centre (MITC), such as physiotherapy classrooms, demonstration rooms of technical aids, Montessori room, training kitchen, gyms, rooms and equipment for the development of arts-based skills for students of the StP "Art Therapy", etc. The Department of Rehabilitation has purchased the equipment necessary for the specific character of each study programme for studies and student research, as well as the resources of the

Rehabilitation Research Laboratory (including gait analysis equipment, gas analyser, CAD/CAM equipment, etc.) have been taken over since November 2022. The financial basis of the Faculty allows for the replenishment of the equipment necessary for studies and student research, planning it by each calendar year.

As the **Faculty of Pharmacy** has been developing very rapidly in recent years, external funding has been attracted for both the construction of a new Faculty building for the Laboratory of Finished Dosage Forms (GZFL) and the purchase of equipment and technologies for study and research purposes.

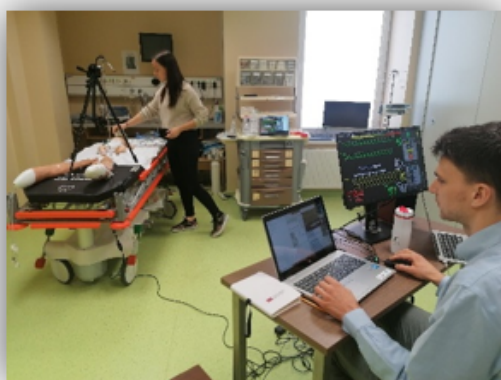
- ERAF, Project number: 1.1.1.4/17/I/011, [Development of RSU pharmaceutical infrastructure](#). Total funding: **EUR 4 390 862.00**
- ERAF, Project number: 8.1.1.0/17/I/006, [Development of the study environment at Rīga Stradiņš University](#). Total funding: **EUR 6 243 821.00**
- Horizon 2020, Project number: 857287, [Baltic Biomaterials Centre for Excellences \(BBCE\)](#) Total funding: **EUR 14 999 869.50** (Partners RTU, LOSI and RSU SI)

The new building and laboratories started their work at the beginning of 2023; new analytical<sup>[1]</sup> and technological equipment is purchased, which will ensure the full solid drug manufacturing process and research<sup>[2]</sup>. The aforementioned equipment is intended for use for both study and scientific purposes.

The material and technical facilities provided by RSU in training of **medical residents** have been significantly improved since the previous reaccreditation process in accordance with the standards of modern medical education.

The infrastructure of RSU Medical Education Technology Centre (MITC) has been developed and the simulation-based training process for medical residents has been improved. Residents of all specialties participate in an annual simulation training seminar in cardiopulmonary resuscitation and emergency situations.

In academic years 2020/2021 and 2021/2022, simulation training, using various simulation scenarios was a pilot project, whereas starting with the academic year 2022/2023 onwards, it is included in the specialty programmes of anaesthesiology, resuscitation, paediatric surgery, general practitioner (family medicine), gynaecology, obstetrics, surgery, paediatrics, ophthalmology, trauma, orthopaedics and urology. See photos below from simulation education for paediatric residents and the cardiopulmonary resuscitation workshop.



Similarly, training of medical residents on living tissues in the Doctors Safe Train Centre has been started at the stage since the previous accreditation. This is theoretical and practical training on living tissue in conditions as close as possible to the real clinical situation. As of the academic year 2022/2023, this training has been established as a compulsory study course and a study



component for the specialties of paediatric surgery, general practice, gynaecology, obstetrics, invasive radiology, surgery and urology. See photos below from the residents' practical training process at the Doctors Safe Train Centre.



The infrastructure and technical facilities established by RSU are equally available for all RSU StPs. More detailed information on the infrastructure and material and technical provision is available in Annex 23.2 “Assessment of the information and methodological provision regarding IT infrastructure and available resources”.

A modern pre-clinic infrastructure with 3 rooms is available for **the study programme “Dentistry”**; pre-clinic virtual simulators with 2 rooms. The Institute of Stomatology operates as a clinical learning centre with all its infrastructure. More detailed information on the material and technical facilities of the Faculty of Dentistry is available on the website of the faculty (information in [Latvian, English](#)), as well as on the website of the Institute of Stomatology (information in [Latvian, English](#)).

Capital shares acquired by RSU have allowed to create a training and research centre for study needs at Liepāja Regional Hospital. The material and technical equipment at RSU **Liepāja branch** is developed in accordance with clinical skills training, is adapted to the simulation process and is regularly updated. Students have the opportunity to practise in seven state-of-the-art simulation and clinical skills development rooms. Each year, the equipment is supplemented within the allocated budget in consultation with MITC specialists, directors of study programmes and course leaders, as well as experts of the field.

In addition to the many study courses of the **Faculty of Medicine** that are implemented at the MITC, the establishment of a study campus at Riga East Clinical University Hospital (RAKUS), as well as work on their establishment at Children's Clinical University Hospital (BKUS) and Pauls Stradiņš Clinical University Hospital (PSKUS), should be noted in order to provide integrative and simulation-based training as close as possible to the real working environment in the health sector.

Since the autumn semester of 2022, the 6th semester international students of the Faculty of Medicine learn the study course “Clinical Care Placement”, MDAK\_075, at the MITC (Medical Education Technology Centre) in a simulated hospital environment.

<https://www.rsu.lv/en/news/metc-turns-simulated-hospital-two-weeks>

111 international students have learned in the simulated hospital environment. This method of training gives the student a sense of security that the theoretical knowledge will be appropriate and used in a safe manner for the patient in clinical placement. The narrative of the simulated patient can be easily modified and adapted to the needs of studies. Teaching staff can provide an individual approach to the student, take the necessary time to strengthen their knowledge in practice. From the experience gained, it is concluded that students appreciate the possibility of simulations, and lecturers will continue to improve the simulated hospital environment.



[1] HPLC - FD/PDA/RI, HPLC - MS/MS, GC/HS - FID, GC - FID, ICP-MS/MS, Calorimeter, Rheometer, Polarimeter, FTIR, TLC/HPTLC

[2] High-shear mixer, Fluid bed dryer/processor, Roller compactor, Bench top tablet press-simulator, Rotary tablet press, Automatic capsule filling machine, Tablet coater, Semi-automatic blister packing machine

**2.3.3. Provide information on the system and procedures for the improvement and purchase of the methodological and informative provision. Description and assessment of the availability of the library and the databases to the students (including in digital environment) and their compliance with the needs of the study field by specifying whether the opening times of the library are appropriate for the students, as well as the number/area of the premises, their suitability for individual studies and research work, the services provided by the library, the available literature for the implementation of the study field, the databases available for the students in the respective field, the statistical data on their use, the procedures for the replenishment of the library stock, as well as the procedures and possibilities for the subscription to the databases.**

### **General information**

The total area of the Library premises is 2044 m<sup>2</sup>, including reading rooms of 1318 m<sup>2</sup> (places for 290 readers, 81 computer sites, wireless internet). The open-access subscription library has well-equipped premises, the possibility of taking books home using self-service machines; there are reading rooms for group and individual work. To ensure accessibility to disabled visitors, the Library has a lift from one floor to another in the main building. The Library is located in the main RSU building (16 Dzirciema iela, Riga), and it has three branches:

- Information Centre for healthcare professionals in Latvia at RSU Red Cross Medical College (J. Asara iela 5, Riga);
- Medical Education Technology Centre, (Anņņmuižas bulv. 26a. Riga);
- RSU Liepāja branch library (Riņķu iela 24/26, Liepāja).

**Library services:** A wide range of information resources, advice on searching for information, including searching by thematic requests. Library professionals conduct information literacy classes, which are included in study programmes and offer support for researchers (information in [Latvian](#), [English](#)).

Students can communicate remotely with the Library on various issues by phone or using the system **help.rsu.lv**. Information resources that are not available in RSU Library collection can be ordered from other libraries using the **Interlibrary Loan (ILL) or the International Interlibrary Loan (IILL)**.

Each year, the Library environment is gradually improved and modernised; new technologies and services are introduced (self-service facilities with possibilities for users to issue the books to themselves, return the books, extend the period of use, view their user account, as well as print, copy and scan by using multifunctional equipment). Self-return facilities allowing to return the library books also outside the Library opening hours are located at the entrance of RSU building at Dzirciema iela 16, and J.Asara iela 5.

### **Information resources**

In the collection: ~ 566 700 physical items, including ~ 254 200 books. The subscribed databases contain ~ **464,700 items of subscribed electronic resources in foreign languages** (including ~90 % of e-books).

Funding for purchasing resources is increasing. Funding per one user of the library was 31 EUR in 2021. Approximately 89 % of the budget intended for acquisition is spent on the subscription of electronic resources / the purchase of e-books.

<b>Year</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>November 2022</b>
<b>Allocated funding (EUR)</b>	<b>350 400</b>	<b>442 360</b>	<b>475 460</b>	<b>503 480</b>	<b>507 234</b>	<b>602 910</b>
including subscribed resources	274 000	301 870	317 532	337 500	339 360	427 872
including Medical learning Database AMBOSS	-	53 542	76 230	81 675	87 428	90 925

## Databases

Access to 30 online e-resources is provided. Students and lecturers can access the subscribed databases remotely using the username and password assigned by RSU.

The statistics on the use of databases are high. It is evaluated every six months. Usage statistics remain high year after year.

E-book databases have very high usage rates, e.g. the ClinicalKey database has 69350 items of information viewed in the first half of 2023 alone. Proquest Ebook Central Academic Complete is the most used e-book database, with 156638 items viewed in the first half of 2023. This data demonstrates the importance of e-books in the study and research process of Health care programmes.

E-journal databases are used to search for individual studies in the study and research process. The most used is the EBSCO LV national package, which consists of several collections, e.g. in the first half of 2023 RSU lecturers and students used 379957 information items in this database. The use of specialised medical e-journal databases is equally important and no less impressive, e.g. the Health Research Premium Collection Journals database had 33722 items of information in use in the first half of 2023, and the MEDLINE Complete database had 30504 items of information in use in the first half of 2023.

Of the evidence-based medical databases, UpToDate has the highest usage statistics, with 107,956 items of information used in the first half of 2023. The Cochrane Library database is recognised as the gold standard in evidence-based healthcare worldwide and the usage figures for the first half of 2023, which amount to 8341 items of information viewed, demonstrate its importance for the implementation of the Healthcare Pathway programmes.

The statistics on the use of the RSU subscribed databases for the Health programmes are compiled

in Annex 23.2 "Assessment of the information and methodological base of the library resources".

Type of database	Database	2021 (information units viewed)	2022 (information units viewed)	First half of 2022 (information units viewed)	First half of 2023 (information units viewed)
E-books	ClinicalKey (books, journals, evidence-based medicine)	207777	145173	81859	69350
	AccessMedicine	85489	78769	36384	34701
	AccessPharmacy	6838	6290	3488	2847
	EBSCO Ebooks Academic Collection	123033	129996	78059	93714
	Proquest Ebook Central Academic Complete	267824	227988	148328	156638
E-books total		690961	588216	348118	357250
E-journals	EBSCO LV National Package	664977	508148	336786	379957
	Dentistry & Oral Sciences Source	48 256	39204	23800	29986
	MEDLINE Complete	48905	39887	24280	30504
	Wiley Journals	21648	26812	15618	17714
	Health Research Premium Collection Journals	39628	41716	27314	33722
	BMJ & BMJ Journals (28 journals)	3592	5118	3070	2733
	PsycARTICLES	5485	5734	3509	4683
	SAGE Premier	16309	17182	10313	11920
E-journals total		848800	683801	444690	511219
Evidence-based medicine	Cochrane Library	643	6365	399	8341
	UpToDate (For 500 Faculty of Medicine students/100 residents)	221748	188559	106459	107956
	DynaMed (unlimited)	25144	28085	17145	11995
Evidence-based medicine total		247535	223009	124003	128292
Dissertations	ProQuest Dissertations & Theses Global: The Sciences and Engineering Collection	2072	2320	1155	4961
Medical learning database	AMBOSS	738743	829884	483926	417636
All databases		2528111	2327230	1401892	1419358

## Procedure for adding to the library's collections and subscribing to databases

RSU has a support process in place that is implemented by the library. It defines how to provide RSU study programmes and research activities with the necessary information sources and services. The process description includes: 1) planning, evaluating and updating the acquisition of information sources; 2) measuring user satisfaction.

Subscription to databases is based on trial periods, usage statistics, user feedback and cost analysis.

In order to improve the relevance of the library collection to the needs of students, work is carried out on the bibliography of study courses. The library informs lecturers about the provision of literature for study courses. Lecturers and students can send orders/suggestions for replenishment electronically to help.rsu.lv.

## Availability of the Library data in the digital environment of the higher education institution

*Primo*, a unified search engine is used to manage E-resources, providing fast and streamlined search for e-resources. Information on databases is available also from RSU Student Portal *MyRSU*.

RSU students can access students' final papers and other RSU publications in the **institutional repository** on the *DSpace* platform.

Since 2020, publications of RSU academic and research staff are entered into the new **Research Activity Information System (ZDIS) Pure** (a unique tool for searching research in RSU research areas).

You can follow the news and current events of the Library on the *Facebook* profile "Rīga Stradiņš University Library".

**RSU Library is an accredited Official State Level library.** The current accreditation was

received in November 2021. The library resources and services are assessed as very good, meeting the demand of students and teaching staff to ensure successful completion of the relevant study course. Simple procedures have been introduced to suggest additions to the collection or to contact the Library about services. Both student and teaching staff surveys confirm good and very good assessment of the Library. In recent years, the Library has received both the Annual Award of the Student Union (as a testimony to students' satisfaction with the quality of resources and services) and the Annual Award of RSU Administration as the best department of RSU. Like other universities in the world today, e-resources are a priority for RSU Library.

More detailed information on the infrastructure and material and technical provision is available in Annex 23.2 "Evaluation of the information and methodological base of the library resources for the implementation of the study direction "Health Care" in accordance with the requirements of the guidelines".

**2.3.4. Provide a description and assessment of information and communication technology solutions used in the study process (e.g., MOODLE). If the study programmes within the study field are implemented in distance learning, the tools specially adapted for this form of study must also be indicated.**

Students and employees of Rīga Stradiņš University (hereinafter - RSU) are provided with a well-developed IT infrastructure and IT services, which are constantly evolving in the light of increasing demand for IT from students and employees.

**E-learning environment**

One of the main sites used by RSU students is the e-learning environment. The e-learning environment provides access to absolutely all study courses implemented in all study plans, so e-learning environment can be used by any lecturer at RSU, and students have access to e-study courses that the student is learning or has previously learned. The e-learning environment is used as a tool for organising the study process in each study course - for uploading various materials, completing tests and homework, checking plagiarism and posting assessment. In addition, the e-learning environment provides a calendar of upcoming events, the latest RSU news and discussion forums, study materials and all the latest information on what the course lecturer wants to share with students - various assignments, sample test papers, useful supplementary materials, etc. In the e-learning environment, students can access not only the courses of the current semester, but also the courses learned in previous semesters and the content of the previously completed courses, as they are for students in the current semester. RSU e-learning environment is available 24 hours a day, 7 days a week from any location with Internet access, including mobile devices. Student portal *MyRSU* is linked to the e-learning environment.

**Student Portal *MyRSU***

RSU students have access to the student portal *MyRSU*, which combines the opportunity to view the necessary information about studies and use e-services necessary for the study process in one place. *MyRSU* is available both as a browser and as a mobile app, which enables faster and more convenient access to all the necessary university information, such as e-learning environment and final grades in study courses, lecture and class timetable, invoices, application for Part B study courses, acquired skills, study course and study programme evaluation questionnaires and feedback, key contacts, access to *Office 365* applications, self-service print management (printing,

scanning, copying). Using *MyRSU*, students can extend the loan periods for books and access RSU subscribed databases. In the statements and submissions section, the student may request various statements, which will be signed with a secure electronic signature and sent to the student's e-mail address.

### **Remote lectures and final examinations**

In the context of the global pandemic, the e-learning environment became the basis for interaction between the university and students. The e-learning environment offers the possibility to create online conferences where the lecturer and students can meet virtually. These online virtual classroom meetings can also be watched later as a recording in the e-learning course. In some courses in the e-learning environment, students also have access to electronic tests for successful completion of the study course, which not only allow a quick and qualitative assessment of the students' knowledge, but can also be used as a tool that allows the student to master the course material with the help of the self-test method. In each e-learning course, the lecturer can electronically record student attendance at lectures and classes, and the attendance data is automatically displayed in the e-grades section, thus providing a more convenient overview of the students' performance in the course. The e-learning environment is also used as a tool to register remotely for placements, tutorials, examination dates and times and other events.

Remote lectures and classes are mostly delivered via *Zoom*; video recordings are available using the *Panopto* service (RSU lecturers were provided with appropriate licences). Under these conditions, RSU lecturers demonstrate great IT skills. Not only the study courses, but also the process of developing, pre-defence and defence of the Master's theses takes place entirely online. This experience leaves no room for doubt about the possibilities of implementing the new study programmes in the form of distance learning. The e-learning environment is already being used as a tool to organise the study process in each study course and provides appropriate opportunities for the implementation of study programmes in the form of distance learning. In order to enhance the export capacity of the study programme, it is planned to implement the study programmes also by distance learning (currently the Bachelor's study programme "Law" is already being implemented by distance learning).

RSU has provided an opportunity for students to submit their final theses in video format using the *Panopto* service. Online examination service is provided in a secure environment using the *LockDown Browser*. The *LockDown Browser* is integrated into e-learning (*Moodle*) and designed to increase security during online examinations. When students use the *LockDown Browser*, it is not possible to perform actions such as copying, visiting other Internet links or apps, closing the test before it is submitted for assessment; the test cannot be minimised or the test window resized; key combinations and the right-click menu of the mouse are disabled, operating system menu bars are disabled, and messaging and screen-sharing links are disabled.

RSU academic staff can make video recordings of lectures and presentations. Links to ready-made video recordings can be posted in RSU e-learning environment as well as on other sites. The service is provided by the *Panopto* service. RSU academic staff can make live broadcasts of lectures and presentations. The service includes the possibility to create a link to the specific live broadcast in advance, which may be placed in RSU e-learning environment as well as on other sites.

*Panopto* enables parallel recording of multiple cameras and screens, search for phrases on slides, add subtitles or tests, as well as user view reports.

### **Content originality checking tools**

RSU academic staff and students have the possibility to use the *Turnitin* tool. *Turnitin* is the world's leading editing and anti-plagiarism tool. *Turnitin* is fully integrated into RSU e-learning environment

and provides a complete service for submission, correction, plagiarism detection and return of submitted work.

All student papers are submitted to the lecturer-created *Turnitin* task, which not only facilitates the collection of papers, but the system automatically checks the originality of the paper, providing a full report on plagiarism in the content. The tool has the option of creating rubrics and comment templates, as well as for students to submit and evaluate each other. Checking for plagiarism is possible by comparing the paper with the work of other students (both at RSU and other higher education institutions in Latvia and in the world that use *Turnitin*), with the Internet resources that are freely available to everyone, and with journals, other publications, and resources included in the *Turnitin* database.

### **Skills monitoring system**

A Skills Monitoring System consisting of several components has been set up for the improvement of students' skills and for the maintenance of the acquired skills portfolio:

1. A catalogue of simulation technology resources, which aims to ensure the management of simulation technology resources, is based on a hierarchical catalogue of simulation technology resources to be used for the acquisition and development of skills.
2. Management of the Medical Education Technology Centre (MITC) resources is aimed at providing support for the management of MITC simulation events and related resources. The basis of the MITC resource management system is the MITC simulation event calendar, where the MITC simulation events are planned, the MITC resources (premises, simulation technology resources, support staff) are planned for their implementation, resources for the implementation of the simulation event and the availability of equipment for planning other simulation events are recorded.
3. RSU e-services portal contains the e-service "Application for skills training and independent development", which provides an opportunity for students to register for the planned simulation events for skills development, the management of which is implemented in the MITC resource management system.

### **E-resources repository**

The e-resource repository [DSpace.rsu.lv](https://dspace.rsu.lv) stores digital research. This site contains articles, papers, conference proceedings and other documents in a variety of digital formats.

The e-Resource Repository (*DSpace*) provides access to the Bachelor's theses, Master's theses and other final theses defended by RSU students since 2020. Various RSU publications in Open Access are also published in the repository on a regular basis.

### **Repository for study materials**

RSU has introduced a repository for study materials, which is a well-structured storage base for digital learning materials, where study materials for learning purposes developed at RSU or obtained as a result of cooperation are placed. These include presentations, video lectures, training videos, infographics, digital interactive scenarios, digital books and other types of information. Materials in the repository are structured by subject and collection, so that the necessary information can be found easily and quickly. Filters will allow you to search by author, year of creation, keywords or the format of the material, such as video, book, or presentation. Searching with the help of filters will provide an opportunity to narrow down the amount of information and quickly find the study material you need.

The repository will give lecturers the opportunity to share materials, saving resources, as well as to familiarise themselves with examples of good practice of their colleagues.

## E-services for students

Upon starting studies at RSU, each student is assigned a username and, using the self-service facility available to RSU students, students obtain a password that can be used in RSU IT systems for students.

RSU offers its students to use *Office365*, providing an option to use full *Microsoft Office*, *OneDrive* file storage without additional fee. While studying at RSU, students have access to all the software necessary for a successful study process. The student can install *Microsoft Office* software: *Word*, *Excel*, *PowerPoint*, *OneNote* on five computers (*Windows* or *Mac*) and five mobile devices (e.g. a smartphone, a laptop and a tablet). Students may use *OneDrive* of 1 TB for automatic synchronisation of devices. With *Microsoft Office 365* synchronisation, RSU students can see their class and lecture timetable on their phones and other smart devices. The service is available using the built-in calendars on smartphones or via *Microsoft Outlook* application. Students can share files using RSU student account *OneDrive* cloud service.

RSU students and staff have access to a modern application system (*JIRA*) on [help.rsu.lv](http://help.rsu.lv), to get the IT or other support they need.

## Mapping system for study programmes

For more efficient management of the study programme, the introduction of the mapping system for study programmes has started. The catalogue, descriptions, learning outcomes and implementation plan of the study programmes and directions implemented at RSU are available in the mapping system for study programmes. The system contains the following sections:

1. Study directions: study directions implemented at RSU and the study programmes included therein.
2. Study programmes: programmes implemented at RSU, their descriptions, learning outcomes and study plans.
3. Implemented programmes: a catalogue of programmes implemented at RSU (includes different types of programme implementation (full-time/part-time), languages (Latvian/English) and locations (Riga/Liepaja).
4. Comparison of study plans: an interface for comparing study plans to review the scope of changes in the programmes and their impact.
5. Documents on requirements: documents regulating the content of study programmes (Cabinet Regulations, Standards for Occupations, etc.) and the requirements included therein, which are used for mapping learning outcomes.

## Student information system

RSU administrative staff have the possibility to use the Student Information System (SIS), where all RSU student data is available, such as student admission data, final grades and study courses. The Academic Portal is the user interface of the Student Information System through which RSU academic staff, Directors of study programmes, Heads of departments and other staff involved in the educational process can access certain data sets located in the Student Information System.

## Academic portal

The Academic Portal was developed for RSU needs to provide access to information from various RSU information systems related to the study process at RSU, such as register of study courses, clinical skills register, survey results, feedback to students related to the survey results, etc. The modular structure of the Academic Portal is based on the *Microsoft SharePoint* platform.

## Improvement of digital skills

RSU Centre for Educational Growth regularly organises continuing education courses on both face-to-face and remote teaching and learning, as well as advises teaching staff on the application of appropriate pedagogical methods and optimal choice of e-learning support tools.

In order to improve the skills of the teaching staff, the IT Department regularly organises thematic training sessions on IT tools, as well as provides an opportunity to apply for online one-to-one consultations with experts in improving the digital skills of the teaching staff. Consultations are mostly provided using one of the communication platforms (*Zoom, MS Teams*).

More detailed information is available in Annex 23.3 “Assessment of the information and methodological provision regarding IT infrastructure and available resources”.

### **2.3.5. Provide information on the procedures for attracting and/or employing the teaching staff (including the call for vacancies, employment, election procedure, etc.), and the assessment of their transparency.**

When developing a new StP, academic and research staff in compliance with provisions of Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions and the Law on Scientific Activity are involved for its provision. Academic and pedagogical staff with high qualification, relevant competence and good reputation are involved in the implementation of the study direction and achievement of learning outcomes.

The process of recruitment and evaluation of lecturers is transparent, effective and one of the prerequisites for high quality of the study process.

At the StP level, the duty of the director of the StP is to ensure the compliance of the content of the programme with internal and external laws and regulations, requirements of the labour market, sectoral development trends and needs of students, to analyse data that might provide information about factors affecting learning outcomes and quality of the StPs and to implement necessary improvements to the StPs. At the StP level, StP quality indicators are measured, which are directly linked to the remuneration of the StP directors.

At RSU level, the management has the responsibility to set strategic and quality aims and quality policy, decide on the quality approach, manage resources and set the internal procedures. The monitoring of the system in place at RSU is carried out both by internal system and quality auditors and by independent external experts. One of the indicators of study quality at the University level is the public attitude and opinion, as well as the popularity of RSU. This is regularly ascertained through participation in reputation surveys and brand evaluations.

Academic staff vacancies are published on the RSU website, section <https://www.rsu.lv/en/jobs-rsu>. Vacancies of scientific staff are published in the National Scientific Activity Information System (NZDIS), section [https://sciencelatvia.lv/#/pub/amatu\\_konkursi/list](https://sciencelatvia.lv/#/pub/amatu_konkursi/list). Vacancies are posted on other portals, such as <https://euraxess.ec.europa.eu/>, if required. Staff members also receive information on competitions for academic posts in their work e-mail.

More information on the processes for recruitment and/or employment of teaching staff is available in the Regulations on Academic Elections (see Annex 1, No. 14.19.) and in Process Description No 29 “Election of Academic Staff” (see Annex 1, 1.14.) specified in Annex 1 and Part 1, Paragraph 1.10 of Annex 23.1 “Compliance of the study direction with the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG)”.



**2.3.6. Specify whether there are common procedures for ensuring the qualification of the academic staff members and the work quality in place and provide the respective assessment thereof. Specify the options for all teaching staff members to improve their qualifications (including the information on the involvement of the teaching staff in different activities, the incentives for their involvement, etc.). Provide the respective examples and specify the way the added value of the possibilities used for the implementation of the study process and the improvement of the study quality is evaluated.**

For the lecturers involved in the study direction and programme implementation, the teaching load is planned according to the study plan of each academic year and study semester. Study courses can be organized in the form of modules, and the workload is reviewed according to the need and regulations. RSU promotes a balanced workload for lecturers, and promotes a healthy lifestyle to reduce and eliminate the risk of burnout among teaching staff.

Academic and research activities at RSU are carried out by distinguished and highly rated permanent employees elected to academic positions. In order to ensure comprehensive knowledge and skills that are valued on the labour market, in addition to permanent employees, teaching staff, who perform their duties as lecturers for a certain period of time, are recruited. The staff includes sectoral experts and teaching staff elected in other higher education institutions,

Annex 6.2 provides biographies of the teaching staff attached electronically (*Curriculum Vitae in Europass* format). 6.1. Annex 6.1 (in Excel format) provides basic information about the teaching staff involved in the implementation of the study direction, specifying their academic degree/qualification, election status at the higher education institution, StP and study courses in the implementation of which they participate, and proof of proficiency in the official language and a foreign language (if applicable). Annexes 24.6/24.7 show the analysis of the teaching staff data.

In order to ensure the fulfilment of functions in support of the training and study process, record keeping and quality management, human resources and financial management, solution of legal issues, RSU employs general and administrative staff. At the same time, the operating staff is responsible for the management of the buildings and the territory, for the development of the infrastructure, etc.

The academic staff application and selection procedure at RSU is regulated by internal regulations:

1. Regulations on academic elections at Rīga Stradiņš University.
2. Regulations on the Procedure for Inviting Visiting Lecturers to Rīga Stradiņš University.

The qualification of candidates for an academic position takes place according to the requirements for the position specified in the Law on Higher Education Institutions, the tasks of academic positions defined in RSU Constitution and the election process at RSU on the basis of the individual's:

- education,
- experience,
- competence,
- potential,
- achievements,
- scientific contribution,

- teaching skills,
- length of employment,
- recommendations of experts and sectoral representatives.

Career development of academic staff is one of the main ways, how RSU can influence the renewal of human resources for research and study.

RSU Centre for Educational Growth was established in 2014 to increase the quality of studies, modernise the study process and improve the competence of the teaching staff. Within the scope of its activity, it provides support for the improvement of the quality of studies by analysing the study process, providing support and advising teaching staff on StP, updating of courses according to current needs and organising pedagogical growth of academic staff in continuing education activities.

The education activities offered by the PIC are based according to the following thematic blocks:

- pedagogy (university didactics and education management),
- technology-enhanced learning and teaching (information and communication technologies, digitisation),
- transversal competences (e.g. skills in communication, collaboration, innovation, improvisation, interdisciplinary and data-driven research).

At the beginning of the activity, thematic activities focused mostly on defining learning outcomes, assessment of the learning outcomes and development of the pedagogical design of the study course, focusing on basic pedagogical regularities. Over time, these topics have been supplemented by a wide range of training activities for the improvement of pedagogical and digital skills of the teaching staff. The great work invested in upgrading of digital skills showed its efficiency during the pandemic with the onset of remote work. The Centre, in active cooperation with RSU Information Technology Department, carried out a huge number of training activities on the use of the communication platforms *Zoom*, *Teams*, the use of the e-learning environment *Moodle*, the organisation of remote group work in the *Miro* tool, the development of interactive digital scenarios in the *Twine* environment, the creation of self-testing tasks on the *H5P* platform and the use of many other digital tools in the study process.

PIC is mostly engaged in counselling activities on a daily basis, which, especially during the period of remote and hybrid learning, has provided significant support for the development of pedagogical and digital skills of the teaching staff and for the meaningful implementation of a technology-enhanced study process.

The most frequent thematic groups identified in the consultations are the following:

- **assessment in the digital environment:** definition of the learning outcomes to be achieved, design of activities, adaptation of the type of examination to full summative, formative and cumulative assessment;
- **organisation of group work and independent work in the digital environment:** promotion of student involvement, cooperation in a team, adequate assessment of individual contribution;
- **high-quality combination of synchronous and asynchronous activities:** creating a study course design for combined, remote and hybrid process;
- **increase in the interactivity of learning activities:** the student is an active participant in the process, not a passive consumer of the content.

Lecturers involved in the implementation of the StPs within the study direction “Health Care” have access to the full range of continuing education content updated each semester at the Centre for

Pedagogical Growth (PIC). Contribution to the quality of the study process is provided by the fact that thematic studies are attended not only by the teaching staff, but also the support staff involved in the organisation of the study process in order to promote pedagogical understanding of the study process and strengthen effective cooperation with the students. Each semester of the academic year, up-to-date content is offered in different formats corresponding to the needs of the teaching staff.

So far, the Centre has developed more than 40 training sessions with different content, tailored to the goal to be achieved. These can include interactive workshops, seminars, conferences, think tanks, thematic cycles, guest lectures, simulation-based scenarios, etc. Since March 2020, the training has been conducted remotely, maintaining equal participation in face-to-face training activities, but also providing an opportunity for a wider range of participants to join the training activities. Every semester, the PIC offers lecturers more than ten different thematic courses in the amount of more than 140 academic hours, for which the interest is steadily growing.

In the academic year 2021/2022, 353 lecturers from the study direction "Health Care" took an active part in continuing training activities for lecturers carried out by the PIC and the Information Technology Department, attending more than 50 training activities of different content. The lecturers of the study programme "Health Care" have devoted a total of 3,664 academic hours to the continuing education activities. A total of 72 lecturers attended more than 5 activities during the academic year 2021/2022.

Lecturers participated in the following PIC activities: Remote group work using the *Miro* tool; *Collaboration and Partnership Towards Professional and Sectoral Development: Local, National, Transnational*; database PubMed and its tools for searching scientific publications; possibilities given by databases *Web of Science* and *Scopus* and comparison; Think Tank: Feedback as a source of learning and an opportunity for development; Think Tank: How to assess to learn? Photo processing for visually appealing learning materials; Inclusive university from A to Z; Interactive presentations and real-time feedback in the *Mentimeter* tool; How games activate teaching and learning; How to promote the acquisition of transversal skills relevant to the working environment in the study process; How to create effective image and text compositions in learning materials; Mediation - an informed and responsible culture for conflict resolution at university; The art of speech; Content visualisation in presentations; *Turnitin*: How to evaluate students' works more qualitatively and efficiently?; Video production: simply and briefly about the complicated and many more.

In order to motivate academic staff to participate in the continuing education activities and to take advantage of the learning opportunities offered by PIC, the participation in the PIC learning activities is included in the academic staff performance bonus criteria; the fulfilment of which allows the academic staff to receive monthly salary supplement. More and more academic staff members are motivated to improve their knowledge and skills thus ensuring higher quality, more interactive and innovative study process for students.

The return on competence development measures is reflected in improvements in the performance of study quality indicators, as well as in the evaluation of RSU external reputation, where RSU has been recognised as the university with the best reputation in Latvia several times in a row. RSU also attracts *Kantar* to conduct research on employee satisfaction. The English language training project assessment was included in the questions of RSU Employee Satisfaction and Engagement Survey in 2019, confirming that 85% of the employees who participated in the survey (a total of 731 employees) consider the English language proficiency testing and training project as an opportunity to improve their qualification. At the same time, with regard to ensuring the development of improvement of the lecturers' competences, most of the 367 lecturers - 86% - answered

affirmatively to the statement "I receive sufficient support for the improvement of my pedagogical competence".

Lecturers have access to:

- 1) training provided by the Medical Education Technology Centre, the Career Centre and the Human Resource Department.
- 2) Study courses at the Open University;
- 3) the possibility to use the materials available in the RSU library collection and other library services;
- 4) the opportunity to participate in the Erasmus+ exchange programme and to gain academic or administrative experience in one of the universities of the European Union and its partnering countries;
- 5) the opportunity to participate in an IT Excellence Programme to develop digital skills for six months at the University at Buffalo, USA;
- 6) opportunities for further training outside RSU within the budget of the unit.

Overall, it can be concluded that systematic and regular activities are being carried out to strengthen the capacity of teaching staff, which is also appreciated. (See Annex 23.1, Paragraph 1.5 for more information)

### **2.3.7. Provide information on the number of the teaching staff members involved in the implementation of the relevant study programmes of the study field, as well as the analysis and assessment of the academic, administrative (if applicable) and research workload.**

Implementation of the compulsory and elective part of the 26 programmes of the study direction "Health Care" is provided by 1131 lecturers, of whom 383 are elected to academic positions at RSU. Of the 383 elected representatives of the academic staff, 50 are professors and 61 are associate professors, 139 assistant professors, 71 lecturers, 46 assistants, 10 leading researchers, 5 researchers, 1 research assistant. See analysis in the Annex 24.7. to the Self-Assessment Report of the study direction.

A certain amount of pedagogical work of the academic staff in the academic year is dedicated to study and organizational work.

The amount of pedagogical work in one academic year is expressed in Pedagogical work units (PDV). The amount of PDV that must be carried out within the academic year by a representative of a specific teaching position (professor, associate professor etc.) is regulated in RSU's internal documents, and it may differ for each position. For higher academic positions, a smaller amount of PDV is defined, leaving more time for research (scientific) work. Each academic year, the amount of PDV of structural units and the amount of PDV of each lecturer and their workload are planned by the Academic Unit. RSU Studies Department analyses the PDV plan and monitors its implementation during the academic year. The diversity of PDV work types in the total PDV volume for each lecturer is monitored. Recommendations are given to heads of structural units to attract new lecturers to balance the workload.

Attached:

Annex 6.1. Basic information about the teaching staff involved in the implementation of the study direction (*in Excel format*).

Annex 6.2 Europass Curriculum Vitae of the teaching staff

Annex 6.4. List of publications of teaching staff during the reporting period (compiled information on the scientific activity of teaching staff).

Annex 24.4. Evidence that the knowledge of the official language of the teaching staff involved in the implementation of the StPs corresponding to the study direction complies with the provisions on the scope of knowledge of the official language and the procedure for testing the official language skills for the performance of professional and job responsibilities.

Annex 24.5. Evidence of the relevant foreign language proficiency of the teaching staff to be involved in the implementation of the StP at least at B2 level according to the Common European Framework of Reference for Languages.

Annex 24.7. Analysis of the composition of the teaching staff.

The teaching staff involved in the implementation of the StD and StPs plan their pedagogical workload according to the study programme for each semester and academic year. Individual study courses are organised in modules and the workload is reviewed in accordance with the need and provisions of laws and regulations.

The implementation of the StD involves highly qualified lecturers who are experts in the sector and specialise in the topics of the respective study course. Lecturers, whose qualification and abilities are of high level and assessed over a long period of cooperation, are involved in the implementation of the StD and StP, therefore, changes in the staff composition are not relevant.

Full-time university lecturers are required to participate in research activity that are regulated by staff job descriptions. Depending on the type of academic position, the proportion of duties and responsibilities of the employee in scientific and research activity has been determined.

The division of responsibilities within a structural unit may be changed by the head of the structural unit in agreement with the employee, according to the planning of the pedagogical work and the projects to be implemented.

Results of the research activity of the academic staff are summarised once a year and included in the research activity report. For some groups of the staff, they are related to the principles of remuneration and motivation. Achievements of the teaching staff can be seen not only in their personal CVs, but also in RSU Scientific Activity Information Management system (ZDIS Pure), where information on the results of the scientific activity of departments and academic staff is added, compiled and maintained.

RSU is constantly planning and implementing activities aimed at motivating the academic staff to engage in high-level scientific and research work, especially in the positions of associate professors and professors (the goal is to achieve the amount of research work in the amount of 60% of the working time), which encourages new specialists to engage in sectoral research, and contribute to the overall development of science at national and international level.

**2.3.8. Assessment of the support available for the students, including the support provided during the study process, as well as career and psychological support by specifying the support to be provided to specific student groups (for instance, students from abroad, part-time students, distance-learning students, students with special needs, etc.).**

A RSU student with special needs is a RSU student with functional limitations requiring adaptation of the study environment and process in order to create equal opportunities to receive the higher education. RSU supports students with disabilities in various stages of their studies – choosing an appropriate StP, when enrolling with the higher education institution, and in the study process (study materials, taking examinations, etc.) and creating an appropriate social and physical environment (for example, accessibility of the environment of the Medical Education Technology Centre, information in [Latvian](#), [English](#); accessibility of the environment at RSU). Support measures aim to promote the independence and inclusion of students with disabilities in the study process. Guidelines and support policy have been developed regarding support to RSU students with disabilities (information in [Latvian](#), [English](#)).

Since 2012, all RSU students can receive psycho-emotional support. This service was introduced to help students at the beginning of their studies to overcome adaptation problems, reduce emotional manifestations of stress, stress-related health disorders, psychosomatic disorders or illnesses, overcome difficulties in building relationships, and crisis situations. A human being is a single entity, and only an emotionally stable and balanced student rarely gets sick and achieves more. The availability of the service has been appreciated by both local and international students. The student can choose to attend group or individual visits with the resident doctor. The introduction of the service has helped to reduce the number of drop-outs, and has contributed to the effectiveness of study work by reducing student stress and adaptive disorders.

RSU has a Career Centre (information in [Latvian](#), [English](#)). The Career Centre is an active member of the Latvian Career Development Support Association (LKAAA). LKAAA is a non-governmental organisation established with the aim of promoting the development of the career development support system (KAAS) intended for strengthening the national economy and well-being of the people of Latvia. LKAAA cooperates with the European Commission Career guidance and information network *Euroguidance*. In Latvia, *Euroguidance* is represented by the Information and Career Support Department of the State Education Development Agency. *Euroguidance* aims to contribute to the policy and practice of the KAAS by providing information to policy makers and support to career guidance counsellors and other actors in the system.

The services of the Career Centre are available to all RSU students, prospective students, as well as employees. Group career counselling is particularly appreciated and in demand. Individual consultations are held regularly for any interested party upon request. Events organised by the Career Centre on current issues in the labour market, as well as other career and self-development related topics, are regular (weekly) and in demand among the students. Students can upload their CVs and receive information about vacancies on the portal of RSU Career Centre (information in [Latvian](#), [English](#)). RSU Career Centre provides literature and information materials on career topics that students can read on the spot or take home for reading. In collaboration with the author Arta Citko, “My Career Notebook” was published, which is a workbook for young people to discover and record their potential career, business or study choices and other experiences.

Since 2019, there has been a great cooperation with the National Library of Latvia (NLL) - “Take a class trip to the NLL and take part in a class of RSU Career Centre!”. Prospective students, i.e., secondary school students, are provided with the opportunity to learn about career choices, higher education options during the seminar, as well as to perform an express test developed at the Career Centre in cooperation with the professionals of RSU Clinic of Psychosomatic Medicine.

There is continuous cooperation with employers on several levels. In order to promote cooperation with employers’ organisations, their involvement in the education of future specialists, as well as to

increase RSU student competitiveness on the labour market, meetings, guest lectures and excursions to cooperation companies and institutions are organised on a regular basis. Employers' organisations give presentations where employer representatives tell about the career opportunities in the respective organisation, offer RSU students and graduates the current vacancies, as well as give practical advice on how to succeed in the labour market.

RSU International Department (ID) provides informational support **to the international students** who have confirmed their desire to commence studies to ensure their successful and swift integration in the university and Latvia. The new international students electronically receive an invitation to RSU Orientation Week, informative edition of *Survival Guide*, internal rules and regulations of the higher education institution, as well as other regulatory study documents and a sample of a study contract in Latvian and in English, also information on various accommodation options in Riga, etc. RSU website in English offers wide information on RSU and life in Riga. The University offers a range of accommodation options to make life easier for students, including the modern RSU Halls of residence at Dārza iela 5, Riga, opened at the end of 2017. The ID provides support to third-country nationals in handling immigration procedures.

One week before the beginning of each semester, the ID organises Orientation Week during which international students are informed about the university, studies, assessment system, students' rights and duties, students' e-systems, immigration and residence aspects, the Latvian culture and language. During the Orientation Week, international students learn about the different RSU departments (e.g. Student Services, Information Technology Department, Library, Faculties, etc.) and the support available. RSU student organisations - RSU Student Union and International Students' Association, are also involved in the events of the Week. In cooperation with the ID, they provide a cultural programme for the new international students.

Mentor programme is maintained with the aim of helping the new international students to adapt to the higher education institution. Even before the new students arrive in Latvia, they may contact mentors, senior local and international RSU students. Before the beginning of each semester, the ID organise the informative exhibition, providing the opportunity for the new international students to obtain information about various RSU student organisations, amateur groups, sports club, health centre and psychosomatic services, etc.

Students of the **Faculty of Rehabilitation** have access to all the support possibilities provided by RSU. In the daily study process, the needs of students can be identified by group and course leaders, who can communicate them with course lecturers, student representatives in the Faculty Council or the Director of the respective StP. The Dean of the Faculty and the Vice-Dean of the Faculty maintain regular communication with student representatives in the Faculty Council. At least once a semester (or more frequently if necessary), the Dean of the Faculty and the Vice-Dean of the Faculty hold meetings with the students of the Faculty (online meetings ensure the involvement of a wider audience). Problems are primarily addressed by students being in contact with the Director of the StP, as well as in individual consultations with the Dean of the Faculty or the Vice-Dean (correspondence, telephone conversations, face-to-face meetings or remotely), as necessary.

The **Faculty of Pharmacy** is small, so the Heads of departments, the StP Directors and the Dean have personal contact with students, so the students ask for help freely, if necessary. The students' wishes are taken into account in the course planning, so that students have time to move from one RSU building to another, and changes suggested by students are taken into account. For example, groups of students are divided according to regions of Latvia, so that students from further places of Latvia do not have classes early on Monday mornings. The factor on time intervals between classes has also been taken into account. Part-time studies are organised on Fridays and Saturdays,

taking into consideration that students combine work in pharmacies as pharmacist assistants with their studies.

In addition to all other support facilities provided at the **Faculty of Public Health and Social Welfare (SVSLF)**, the students themselves are also actively involved in providing assistance - the Master's students of the SVSLF study programme "Health Psychology" (study direction "Psychology") provided remote psychological assistance to RSU students and employees on various issues free of charge during their placement in cooperation with RSU Career Centre.

The Faculty of Residency provides support to undergraduate students of Medicine in the choice of further professional career (specialty and workplace) for studies in residency. For example, in the academic year 2021/2022, the Faculty of Residency organised the following activities for undergraduate students in medicine (the primary target group: 5th and 6th year students):

1. information days about studies in residency, informing students about the admission requirements to the residency competition,
2. a seminar on the admission interview of the residency competition. The format of the seminar was a presentation by RSU Career Centre on the principles of successful self-presentation in a job/residency specialty selection interview, examples of good practice (exchange of experience) from representatives of interview committees and residents.
3. meeting of the representatives of medical institutions with students on the possibilities of cooperation (residency studies and work). 11 meetings in total - with representatives of Balvi and Gulbene Hospital Association, Central Laboratory, Daugavpils Regional Hospital, Jelgava City Hospital, Jēkabpils Regional Hospital, Liepāja Regional Hospital, P.Stradiņš Clinical University Hospital, Rēzekne Hospital, Riga East Clinical University Hospital, Health Centre Association, Vidzeme Hospital, and North Kurzeme Regional Hospital.
4. 4 information seminars on studies in a specific specialty at RSU (anaesthesiology, resuscitation, haematology, surgery and laboratory doctor).

The Faculty of Residency also develops and maintains a vacancy platform (available only [Latvian](#)), a website that regularly provides information about doctors-specialists needed by medical institutions (medical institutions are surveyed centrally twice a year; more frequent updates are provided at the request of the medical institution). Based on the information on this site, a prospective or current resident can contact the medical institution of interest and discuss potential collaboration (work) opportunities in the specialty.

Undergraduate medical students can also apply for a one-to-one meeting about residency study opportunities - receiving personalised information about the documents to be submitted and personalised information about study opportunities in a specific specialty, including finding a specific medical institution - the residency employer.

When assessing the support for students in residency studies, it should be mentioned that the Faculty of Residency has established mechanisms for proportionate workload of a resident in a medical institution. Contracts with medical institutions for training of medical residents stipulate that a medical resident carries out the study work in accordance with normal working hours (168 hours per month on average) and that additional workload in residency is possible only within 11 additional hours of duty, provided that the medical resident agrees to this in writing. Guidelines on on-duty shifts have also been developed, which are binding on all the parties involved - medical residents and medical institutions, and which set out the basic principles for the implementation of on-duty shifts, including, for example, exempting pregnant women and postnatal women from night duty.

Starting in 2022, a mentor position has been created for international students at the **Faculty of**



**Dentistry** to allow students to better adapt to RSU environment. The mentor also deals with the organisation of placements for international students and carries out activities related to the provision of a friendly learning environment.

Examinations are adapted as far as possible for students with disabilities. For example, students with dyslexia are individually guaranteed longer examination periods.

The support needed by the students of **Liepāja branch** is constantly monitored in communication with directors of study programmes, coordinators, the organiser of the study process and the office manager. The current issues and problems to be solved in Liepāja branch are reflected in the results of student surveys. At the beginning of studies, mentors are offered to the new students in cooperation with the Student Union, who help to integrate into the study process, familiarise them with the environment, regulatory documents and provide support where necessary

Doctoral students of the **Department of Doctoral Studies** are provided with all kinds of support during their studies and after completion of studies, when they start the doctoral promotion process.

During their studies, doctoral students receive support from their doctoral thesis supervisor(s), Heads of sub-programmes, Director of the programme, Dean of the Department of Doctoral Studies and the support staff. For example, when planning the study programme, doctoral students are scheduled to study once a week in the afternoons from about 15.00 to 18.15. so that doctoral students can combine their studies and their main work.

After successful completion of the study programme, the organisers of the doctoral study process of the Department of Doctoral Studies provide all kinds of support to PhD candidates, providing the necessary information about the commencement of the doctoral promotion process, the progress of the process and the defence of the doctoral thesis. For example, the Department of Doctoral Studies offers services of Latvian and English text editors to PhD candidates.

The **Faculty of Medicine** regularly meets with study year leaders, group leaders and student councillors. In addition to support for the study process, the role of psycho-emotional well-being and health in the life of a medical student is emphasised in these discussions. Time management, the need for regular rest and self-assessment are discussed. It is emphasized that alongside the direct learning of the study course content, it should be taken into account that medical studies require intellectual, emotional and personal intensive growth, which requires good physical and stable mental health. Student leaders are taught basic self-care and emotional self-assessment techniques, encouraged to monitor the well-being of their fellow students, and to involve the Dean's Office in addressing and supporting any difficulties or deviations. Regular and intensive support was also provided to students at the onset of the pandemic, when an atmosphere of uncertainty and anxiety prevailed in society. Regular remote meetings were held to help students overcome the feeling of isolation. If necessary, individual counselling with the appropriate specialists was also organised and individual study arrangements discussed.

In career support counselling, meetings are organised with the Faculty of Residency, involving foreign lecturers, who also talk about aspects of career development abroad, professionalism and basic values of life beyond medical knowledge in an informal atmosphere (e.g. Finnish neurosurgeon, author of the book *Memoirs of a Neurosurgeon* in an informal lecture on 09.12.22. RSU gathered an audience of almost 500 students).

## 2.4. Scientific Research and Artistic Creation

**2.4.1. Description and assessment of the fields of scientific research and/or artistic creation in the study field, their compliance with the aims of the higher education institution/ college and the study field, and the development level of scientific research and artistic creation (provide a separate description of the role of the doctoral study programmes, if applicable).**

**RSU is a modern research university in Europe** providing excellent research and practice-based education and experience. The aim of RSU research is to produce research results of local and international significance, the main sub-goals are:

- increase in internationally high-quality research results,
- integration of research into the study process,
- organisation of a science process based on synergistic cooperation,
- digitisation of research processes,
- closer integration of science and study departments,
- ensuring a balanced development of internationalisation.

RSU research aims are implemented on the basis of the strategy; the current Development Strategy for 2022-2027 (available in [Latvian](#), [English](#)).

RSU researchers conduct not only fundamental and applied research, but also actively co-operate with business people in Latvia and Europe, as well as with other research institutions, providing research services and expertise. RSU supports and promotes interdisciplinary and cross-sectoral research, as well as data-intensive research and research involving the re-use of data.

**RSU research is carried out on three research platforms: the medical platform, public health platform and social sciences platform**, each of which conducts research in several groups of scientific disciplines, in priority science directions for the economy of Latvia and in areas determined by the health policy of Latvia and EU. (information on RSU research platforms is available in [Latvian](#) and [English](#)). The research areas are being updated as policy documents are updated.

### **Medical Platform**

The Medical Platform (hereinafter - the MP) supports research in medicine, pharmacy and dentistry, with fundamental, applied and clinical research carried out in all these fields. Research covers major disease groups and practically all basic sciences of medicine - molecular aspects of diseases, genetics, epidemiology, prognosis and treatment, impact on quality of life, treatment goals and outcomes. Leading topics that RSU should continue to develop as a priority are general medicine, oncology, infectology, microbiology and virology. The MP is the second largest scientific institution in the field of medicine and health sciences in the ecosystem of biomedicine in Latvia with the largest number of peer-reviewed publications included in *SCOPUS* and *Web of Science* (hereinafter - *WoS*). Compared to 2016, the scientific results have significantly improved, as characterised by the number of original scientific articles published and cited in *WoS* or *SCOPUS* databases, peer-reviewed scientific monographs published by the research staff and the intellectual property maintained or registered abroad. The number of scientific results mentioned above has doubled in absolute terms (from 359 to 728 in 2016 and 2020 respectively), but in terms of per full-time equivalent (hereinafter - FTE) from 4.2 to 7.3910, respectively. A similar increase is observed in the number of original scientific articles, peer-reviewed scientific monographs published by the research staff, which are not published in the *WoS* and *SCOPUS* databases and in the number of patents registered and maintained in Latvia (in absolute terms from 864 to 1540; per FTE from 10.1

to 15.5 in 2016 and 2020 respectively)[1].

In order to achieve the goals set by RSU, research in life sciences, including microbiology and virology, should be particularly promoted, where not only the existing research topics should be supported, but also the development of new research areas should be encouraged and appropriate investments in infrastructure should be made.

The development of bioinformatics is identified as a horizontal priority on this platform, as this area not only contributes to RSU research in the current field of multiomics and develops the digital skills of researchers, but also acts as an infrastructure in areas where large-scale data analysis is needed. Understanding the need for strong expertise in bioinformatics and big data analytics, RSU has established a Bioinformatics Laboratory (information in [Latvian](#), [English](#)). The main focus of the laboratory is the analysis and integration of genome, transcriptome, microbiome and other omics data with epidemiological, clinical, and environmental and lifestyle information in the context of personalised medicine, which aims to adapt diagnosis and therapy to the needs of individuals.

### **Public Health Platform**

The Public Health Platform (hereinafter - the PHP) includes research that substantively addresses practical problems in the fields of public health, occupational safety and environmental health, as well as rehabilitation. Research areas covered on this platform include epidemiology, disease prevention and health promotion, rehabilitation, healthy ageing, longevity, quality of life research, health systems and digital health, health economics, internal and external analysis of the sector, occupational safety and environmental health: sustainable urban development, impact on climate, new technologies for nanoparticle detection, the working environment and occupational diseases.

### **Social Sciences Platform**

The Social Sciences Platform is developing as an independent and valuable research unit on people and society. The Social Sciences Platform conducts research in all fields of social sciences: psychology, economics, education, sociology and social work, law, political science, media and communication research, etc. The main areas of empirical and theoretical research are political and state processes, media studies and strategic communication, national, international and cyber security, development of international business and economy - labour market and social policy, business research; international and national justice systems and legislation: international and EU law, medical law. Multidisciplinary and interdisciplinary research encompasses media studies, various fields of communication, sociology, psychology, social anthropology, supplementing time-tested research methods with the use and development of innovative digital tools, including elements of artificial intelligence. The Platform also supports research in education and pedagogy. In accordance with the recommendations of the international evaluation experts of RSU Social Sciences Platform, RSU Social Sciences Platform synergistically cooperates with RSU Medical and Public Health Platform, promoting a comprehensive understanding of the research of RSU value - the human being.

**RSU was highly rated in the “International Assessment of Scientific Institutions” carried out in 2019:** “4” on a scale of 1 to 5. More detailed ratings were also given for individual RSU research platforms: medicine - 4, public health - 3, social sciences - 3. This assessment identified certain areas of RSU that provide internationally recognised research quality, such as virology, vaccine research, phage research, dentistry and stomatology.

Whereas, one of the recommendations of the “International Assessment of Scientific Institutions” for doctoral theses is to develop tailor-made doctoral programmes to promote staff development in RSU research areas. This requires driving changes to external regulation in order to introduce a higher degree of flexibility in the day-to-day study process. In addition, the “International

Assessment of Scientific Institutions” highlights the need for improvements in doctoral study programmes and residency, as the current system meets the set European standards only at a minimum level. In line with the recommendations of the international evaluation experts of RSU Medical Platform, the involvement of RSU researchers in clinical trials should be promoted, which is actively being implemented. According to the recommendations of the international evaluation experts of RSU Public Health Platform, the development of the Platform requires the attraction of talents that could develop new research topics.

In 2008, with the involvement of ERDF co-financing, the **Technology Transfer Office** (hereinafter - the TTO) was set up at RSU with the aim of developing and maintaining external relations with the private sector by providing information on RSU research activities and experience. The TTO identifies and promotes RSU research capacity, deals with the protection and management of RSU intellectual property, as well as organises cooperation with the private sector (commissioned research, commercialized offers to companies, contact exchanges, exhibitions, etc.).

Organisation of research at the University is governed by the Law on Scientific Activity. The highest collegial body in research is RSU Council of Science, a collegial body that acts independently and within the scope of its competence deals with and coordinates matters related to research activity (information is available only in [Latvian](#)). The functions and tasks of RSU Council of Science are defined by the Regulations of RSU Council of Science (approved at RSU Senate meeting of 19 May 2020, available only in [Latvian](#)). The functions of the Council of Science are to supervise the development and implementation of RSU research strategy and to coordinate the processes of scientific activity.

The Council of Science elects RSU Research Ethics Committee (information in [Latvian](#), [English](#)), which helps RSU teaching staff and students by advising and evaluating ethical aspects of medical research. The Research Ethics Committee complies with its regulations, laws of the Republic of Latvia and international law in biomedical research, and it is independent and autonomous in decisions taken.

RSU adheres to the **European Code of Conduct for Research Integrity** adopted by the European Academies of Sciences (ALLEA) (information in [Latvian](#), [English](#)). This document is a self-regulatory instrument of the European Research Community. The European Commission has recognised this Code of Conduct as the reference document for research integrity issues in all EU-funded research projects.

RSU research data management (information in [Latvian](#), [English](#)) is implemented on the basis of FAIR principles (findable, accessible, interoperable, reusable), respecting ethical conditions, ensuring data security and quality. RSU supports data-intensive research and research involving the re-use of data.

At the level of operational administration, the management of research activities is carried out by the Board of Science, that is chaired by RSU Vice-Rector for Science.

Annual monitoring in research is ensured through annual compilation of the results of scientific activity of structural units. All data is retrieved from RSU Research Portal (available only in [English](#)). RSU Research Portal collects information on the results of scientific activity of RSU academic staff - publications, projects, awards, research activities, datasets, presentations, communication in the press and media and others.

The portal is publicly accessible and allows to display RSU achievements in research and academic work in one place, to visualise and communicate the results of scientific activity, as well as to share research results. RSU Research Portal facilitates cooperation with the university researchers and research groups, communication and dissemination of knowledge.

RSU Research Portal displays information connected to RSU Current Research Information System (*ZDIS Pure*), where information on the results of scientific activities of structural units and academic staff is added, compiled and maintained. The data accumulated in *ZDIS Pure* is used to generate reports, follow the progress of the goal of the structural unit, prepare research activity reports for external institutions, while reducing the administrative burden on researchers, structural units and staff

In accordance with the financial possibilities of RSU and the topicality of the research direction, RSU supports the participation of the academic staff in scientific conferences by assigning a paid period of absence or creative leave, provides financial support for high citation publications.

[1]Science base funding criterion

#### **2.4.2. The relation between scientific research and/or artistic creation and the study process, including the description and assessment of the use of the outcomes in the study process.**

In the study direction Health Care, the link between scientific research and the study process takes place through the involvement of students in research in several ways:

At different stages of the study process, students of the **Faculty of Rehabilitation** gradually acquire research skills (research process, principles of ethics in research, information literacy, research methods), critical reasoning abilities and skills to integrate research results into professional activity (evidence-based rehabilitation interventions). At the end of studies, students independently develop research papers (Bachelor's or Master's thesis). The results of students' research papers may be used in the study process as examples or by providing an in-depth insight into a problem in the field of rehabilitation or by supplementing the range of functional assessment methods. (e.g. part of the Bachelor's theses developed in RF includes translation and validation of specific standardised functional assessment tools in the context of Latvia).

Students of StP of the **Faculty of Pharmacy** can publish their research results in scientific journals or participate in RSU or other international conferences. For award-winning results at RSU student conferences or international publications, the student's performance is validated as a research paper or the student gets an increase in assessment by one grade. Each year, 2-4 students in the Faculty receive awards at the conference, and additional 3-4 students receive a grade increase. During the study process, teaching staff share their own and their students' research work, which can be included in the relevant study course. The most research results are demonstrated in the study courses "Pharmaceutical Chemistry", "Medicinal Chemistry", "Pharmacology", "Pharmacognosy", "Clinical Pharmacy", "Pharmacogenetics" and "Social Pharmacy", which are taught by teaching staff active in the field of science who also involve students in their projects.

Evidence-based knowledge, action and decision-making in the study process are emphasized and taught at the **Faculty of Public Health and Social Welfare** from the beginning of studies, thus ensuring not only understanding and evidence-based behaviour/practice, but also guided interest in research, which is the basic tool for generating this evidence. During the study process, students are required to collect, synthesize and analyse research data on specific problem issues or interventions within several study courses, summarising the obtained results in the form of presentations, semester papers, etc., which enrich the study process for other students, as well as to carry out their own research within the framework of final papers.

The use of the results of research work of the students in the study process in the **Faculty of Dentistry** is carried out by using the results of the students' scientific research work as methodological and additional material for other students. Starting from autumn 2021, students have had the opportunity to participate in the activities of the Baltic Biomaterial Centre of Excellence (BBCE) and carry out their own research work.

The use of the results of research work of the students in the study process in **Liepāja branch** allows to demonstrate an understanding of the implementation of evidence-based achievements in practice, as well as the implementation and management of patient care processes through educating patients and their family members, healthcare team specialists and the public in cooperation with other health and social care professionals and institutions in compliance with the rules of professional ethics and legal norms. Two lecturers are working on their doctoral theses.

During the doctoral studies the doctoral student works on his/her research paper, carries out pedagogical work in the department where the research paper is written, publishes articles on the topic of his/her doctoral thesis, participates in research projects and scientific activities not only in Latvia but also abroad.

In order to successfully complete the study programme, the doctoral student must carry out scientific research work, pedagogical work and knowledge dissemination throughout the study period, as well as publish articles on the topic of his/her doctoral thesis. Doctoral students report on their achievements and research progress to the Research Activity Evaluation Committee at the end of each year of study.

For example, the Regulations for Doctoral Studies stipulate that in order to recognise **the four-year** doctoral study programme as successfully completed, the doctoral student must have completed all the courses required for the doctoral study programme and must have carried out research and scientific activity (related to the topic of the doctoral thesis) during the doctoral studies, which meets at least one of the following criteria:

- Two double-blind peer-reviewed scientific publications in scholarly journals or conference proceedings indexed in *SCOPUS* or *Web of Science* database, or included in the *ERIX+* database;
- One double-blind peer-reviewed scientific publication in a scholarly journal or conference proceedings indexed in *SCOPUS* or *Web of Science* database, or included in the *ERIX+* database and a peer-reviewed scientific monograph on one research topic or problem, and containing a bibliography. If the peer-reviewed scientific monograph is published in Latvian, it should contain a summary in at least one of the other official languages of the European Union or, if the peer-reviewed scientific monograph is published in a language other than the official language of the European Union, it should contain a summary in at least one of the official languages of the European Union.

Students of the **Faculty of Medicine** have the opportunity to participate in Vertically Integrated Projects (VIP), which are integrated into the study process and implemented by several departments of the Faculty. The VIP is a new and innovative addition to the study process that provides significant practical knowledge in conducting research activities for students at all levels. Since the autumn semester of 2019, six VIP teams have been working at Rīga Stradiņš University, conducting various research and activities.

The VIP teams of students and researchers are multidisciplinary and vertically integrated, which means that both first-year students from the social platform and students of residency can work in the same team. Accordingly, a fully-fledged team is formed, in which students acquire knowledge both from experienced lecturers and their own team members.

The expected size of one team is between 5 and 15 students, and there is no limit to the number of applications. Consequently, students can be part of a VIP team for all years of study or just for one semester.

The Department of Occupational and Environmental Medicine implements several VIP teams on various topics related to the following themes of the study course Environmental Medicine and its integration. The Department offers students to participate in research with a number of topics - VIP ERGONOMIC WORKPLACES IN A HEALTHY ENVIRONMENT: ERGONOMICS, which consists of several sub-teams with different tasks:

**Group 1. Theoretical and practical study of the biomechanics of neck movement and factors affecting health in humans working with a computer monitor.**

The influence of the height and angle of the monitor on neck muscle tension. The team members will be required to take practical measurements of neck muscle tension using a myotonometer or surface electromyograph, to process the obtained results, to carry out literature analysis and compilation; development of own research paper is also possible

**Group 2. The impact of the design and material of computer mice and their pads on the health of users' hands during prolonged computer use.**

The team members will be required to participate in the organisation and taking of practical measurements with digital infrared thermograph, to process the obtained results, analyse and compile data from literature sources; they will also be able to develop their own research paper.

**Group 3. Study of the health effects of shock absorbing carpets and standing chairs in case of long standing.**

Organise and participate in motion analysis and measurements of muscle strain using 3D motion analysis equipment and surface electromyography, to process the obtained results, analyse and compile data from literature sources; they will also be able to develop their own research paper.

**Group 4. Study of sedentary lifestyle and factors contributing to and mitigating it.**

The team members will be required to participate in practical measurements with portable 3D motion analysers, process the obtained results, analyse and compile data from literature sources; they will also be able to develop their own research paper.

VIP ERGONOMIC WORKPLACES IN A HEALTHY ENVIRONMENT: INDOOR AIR QUALITY has also a number of sub-teams with different tasks:

**Group 1. Assessment of indoor air pollution in dwellings**

Participants will: measure the indoor air in their own homes using laboratory equipment, identify sources; assess the potential impact on comfort and health. Participants will prepare an analysis of the results, a summary that will be created as a scientific paper and abstracts for conferences.

**Group 2. Indoor air pollution caused by 3D printers**

Participants will participate in the planning and organisation of an experiment in 3D printer office space/rooms (different types of 3D printers). Indoor air quality measurements will be made (determination of particle number and mass concentration, determination of volatile organic compounds, assessment of the chemical composition of dust particles, etc., as well as a questionnaire will be designed and the survey conducted on assessment of the health condition of office staff. Results of the work: analysis and summary of all the data that will be formed in accordance with the requirements of the scientific article.

### **Group 3. Life cycle of chemical products and environmental health: public awareness, attitudes and behaviour**

Participants will design a questionnaire on the life cycle, choice, composition of chemical products, etc., as well as will create situational tasks that will help to understand respondents' attitudes and behaviour. Participants will also assess the indirect impact of chemicals used in households on human and environmental health by analysing the toxicity of chemicals and environmental data to demonstrate the consequences of the action. The obtained results will be used to purposefully prepare materials (including training) to raise public awareness and social responsibility.

### **Group 4. Risks and conditions in the working environment**

The team will compile data from the surveys already conducted (4 cross-sectional studies with identical questionnaire), looking at the work environment and safety issues of interest. The results will be summarised in reports and it will be possible to publish the findings in conferences and scientific articles.

### **Use of the results of the students' research work in the study process.**

An important role in linking research and the study process is played by the relatively recently launched Vertically Integrated Project (VIP) institution at RSU. Around a topic proposed by a lecturer (often a doctoral student), it brings together all-level students who, each carrying out a certain part of the research necessary for the development of the project, which transforms into a semester paper, Bachelor's or Master's thesis, contribute to the implementation of a larger research idea. For example, several VIP groups are currently working in the StP "Art Therapy" of the Faculty of Rehabilitation where students not only develop their Master's theses (outcome of the study process), but also produce publications of international standing and disseminate the results at conferences.

The analysis of the topics of the Master's theses defended in the **Department of Rehabilitation** highlights certain thematic blocks:

- 1) translation into Latvian and validation of specific functional assessment tools (e.g. Questionnaires on occupational rehabilitation issues, rapid automated naming and rapid alternating stimulus test, etc.);
- 2) comparison of the content and psychometric properties of functional state assessment instruments in the context of various clinical problems (e.g. brain tumours, swallowing disorders, etc.);
- 3) evaluation of the quality and effectiveness of various rehabilitation services (for example, outpatient physiotherapy services, inpatient stroke rehabilitation, rehabilitation services for persons after unilateral lower limb amputation, etc.);
- 4) implementation of a family-oriented approach for children with functional limitations;
- 5) technologies and innovations in rehabilitation.

After the defence of the Master's thesis, based on the discussions, assessment and recommendations of the Defence Committee, Master's students are invited to publish their research results in conferences of professional associations, local and international conferences in the field, as well as to produce scientific publications. Doctoral students are involved in the implementation of Bachelor and Master's study programmes, including on topics directly resulting from their doctoral research.



### 2.4.3. Description and assessment of the international cooperation in the field of scientific research and/or artistic creation by specifying any joint projects, researches, etc. Specify those study programmes, which benefit from this cooperation. Specify the future plans for the development of international cooperation in the field of scientific research and/or artistic creation.

In order to promote cooperation and attract funding for the development of priority research areas, RSU takes an active part in various EU and national programmes and initiatives - Horizon Europe, the largest EU research and innovation programme, international cooperation programmes such as COST Actions; ERA-NET, ERDF, FLAG-ERA, etc. RSU is a member of international research infrastructures (EATRIS, BBMRI, EOSC, SHARE), EIT Health, and participates in international consortia (CIMBA, BCAC).

A total of 130 international research projects were submitted for 2017-2021, 39 of which were funded. These include 13 projects under Horizon 2020 and 9 are ERA-NET projects. Overall, the share of successful projects in Horizon 2020 is 13% on average and 22% in ERA-NET, slightly higher than the EU average. The most important projects for the EU Structural Funds are related to infrastructure improvements, improvement of management processes and modernisation of the content of study programmes, strengthening the capacity of academic staff, reducing fragmentation of study programmes and promoting internationalisation of studies, as well as during this period RSU has welcomed foreign visiting researchers in its research community.

In order to develop research competence, a one-stop agency at the **Doctoral School** (information in [Latvian](#), [English](#)) recruits visiting lecturers, who give lectures, participate in researcher breakfast (information in [Latvian](#), [English](#)) and networking events for academic and research staff, in which topical issues in research are discussed. The Doctoral School organises international webinar cycles with the involvement of visiting lecturers and leading experts, for example, an interdisciplinary webinar cycle of cognitive sciences, webinars on the application of FAIR data principles in medical and health sciences (information in [Latvian](#), [English](#)).

**RSU Department of Doctoral Studies** is one of the collaboration partners in SHARE (Survey of Health, Ageing and Retirement in Europe) research, which is the infrastructure of ESFRI and provides information on health, ageing and retirement in Europe. The data obtained in the study gives researchers a broader insight into how ageing affects individuals and their families. The research allows to compare the data obtained internationally and to promote the development of effective measures that allow for a more successful resolution of ageing-related challenges. The research is carried out every two years and the number of participating countries increases each time. In 2017, eight more countries, including Latvia, took part in primary data collection. The research is carried out at the same time in 27 European Union countries, as well as in Switzerland and Israel.

In order to promote closer cooperation in research, RSU concludes cooperation agreements with leading scientific institutions.

RSU organises international scientific conferences (information in [Latvian](#), [English](#)), supports international symposia and conferences organised by other scientific institutions, for example, International Symposium on Cognitive Sciences, Logic and Communication (information in [Latvian](#), [English](#)).

Students of the study programmes of the **Faculty of Pharmacy** are involved in the **Horizon 2020** (2020 - 2026) project implemented by the [Baltic Biomaterials Centre of Excellence \(BBCE\)](#)

(supervisor, Professor D.Bandere). The project is developed in cooperation with Latvian Institute of Organic Synthesis (LOSI), RTU, RSU Institute of Stomatology, as well as [AO Research Institute in Davos](#) (Switzerland) and [Friedrich-Alexander Erlangen-University of Nuremberg](#) (Germany) in accordance with the Smart Specialisation Strategy of Latvia - Biomedicine, Medical Technologies, Biopharmacy and Biotechnology. The project offers extensive training opportunities for both faculty staff and doctoral students and undergraduates. The project stimulates students' involvement in research and offers a wide range of educational activities and training.

The **Faculty of Dentistry** has international cooperation within the BBCE with German and Swiss research institutions, the University of Erlangen and the AO Centre in Davos. In the field of scientific research, there is cooperation with universities in Rostock, Malmö, Cardiff, Oulu and others. A cooperation agreement with the University at Buffalo, USA, is planned. Cooperation with the University of Rostock is in the specialty of Oral and Maxillofacial sciences. Cooperation with Cardiff University and University of Oulu is related to the use and analysis of 3Dimensia facial images.

Teaching staff of the **Faculty of Public Health and Social Welfare** are involved in international cooperation in research within various projects and initiatives, such as the EU programme “Horizon 2020” SHARE (Survey of Health, Ageing and Retirement in Europe) study on health, ageing and retirement in Europe, the EEA/Norwegian government funding project “Towards elimination of cervical cancer: intelligent and personalised solutions for cancer screening”, the World Health Organisation, CDPC, MoH and RSU cooperation study “Health Behaviour in School-aged Children” (HBSC), the research project “How to protect a normal birth” within the Nordejordemodern Network (involving not only teaching staff but also students), etc.

International cooperation in **Liepāja branch**, is projected in the mobility of teaching staff. In the context of cooperation projects, the research topics have been updated. Pilot studies are planned and carried out under the Erasmus + programme in relation to the objectives activated in Europe and set in projects. Within the framework of the project implemented in the previous financing period, on the basis of the research carried out by professionals of the cooperation countries, Methodological material for work with seniors was compiled and integrated into the relevant study courses. Similarly, it is planned to create a new Methodological tool at the next stage of the project. Teaching staff also participate individually in teaching visits.

Teaching staff from the Department of Paediatrics of RSU **Faculty of Medicine** participate in the EU Horizon 2020 research project “Diagnosis and Management of Febrile Illness using RNA Personalised Molecular Signature Diagnosis (DIAMONDS)”, which will continue until the end of 2024. The project addresses the challenge of introducing personalised medicine into everyday EU healthcare systems to diagnose and treat the most common infectious and inflammatory diseases, which account for one third of all medical cases in primary care and hospital. Within the framework of the research, a new diagnostic approach to infectious and inflammatory diseases is offered based on the exclusion and activation ability of a small set of genes, thus identifying all common conditions simultaneously. This approach is known as molecular signature-based diagnosis (MSBD).

An international ERA NET NEURON cooperation project Examining the Synergistic Effects of a Cognitive Control Videogame and a Home-based, Self-administered Non-invasive Brain Stimulation on Alleviating Depression (DiSCoVeR) contract No 1.1.1.5/ERANET/19/04, started in 2019 and will continue until 2024 at the Department of Psychiatry, Faculty of Medicine with results of international significance from both research and clinical aspect. In addition, colleagues of the Department have also participated in the NATO Science and Technology Organisation project Panel of Human Factors and Medicine Research Task Group HFM-RTG 277 “Leadership Tools for Suicide Prevention” in a 5-year long term. Strengthening the role of leaders in suicide prevention in the military structures of NATO Member States. 2017-2022, but in 2022, cooperation with the

University of Turku (Finland) was launched and continues under the leadership of the Prof. Andre Sourander “Global Child and Adolescent Mental Health Study (GCAMHS)”, an international study on the mental health of adolescents, the results of which will be of great practical relevance.

Since 2021, teaching staff of the Department of Obstetrics and Gynaecology of the Faculty of Medicine have been participating in the World Health Organisation (WHO) study IMAGiNE EURO – Improving MAternal and Newborn carE in the EURO region, which will provide a significant improvement in maternal and child health in European countries, including Latvia.

The Statistics Unit of the Faculty of Medicine have been participating in the European Economic Area and Norway Grant (EEA/N) programme Research and Education”, EEA-GRANT-205 project Promoting Healthy Ageing, Welfare and Social Security from 2021 to 2024.

**2.4.4. Specify the way how the higher education institution/ college promotes the involvement of the teaching staff in scientific research and/or artistic creation. Provide the description and assessment of the activities carried out by the academic staff in the field of scientific research and/or artistic creation relevant to the study field by providing examples.**

The **Faculty of Rehabilitation** is part of the ecosystem of RSU Public Health Platform. Scientific research in the Faculty is characterised by thematic diversity and interdisciplinary cooperation with other RSU departments and cooperation partners outside the University. In 2022, staff of the Faculty of Rehabilitation were co-authors of 9 publications, and participated in the implementation of 4 projects at the level of Latvia and RSU.

The **Faculty of Public Health and Social Welfare** is also a member of RSU Public Health Research Platform. The teaching staff of the Faculty are also involved in research projects of RSU Institute of Public Health, as well as carry out research within the framework of local and international research initiatives, such as the project of the National Research Programme for mitigation of the consequences of COVID-19 “Impact of Covid-19 epidemic on the healthcare system and public health in Latvia; strengthening health sector preparedness for future epidemics”.

Several support mechanisms have been developed at RSU that stimulate teaching staff to develop their scientific activity. The **Faculty of Pharmacy** implements one Horizon 2020 project (BBCE), one Latvian Council of Science, Fundamental and Applied Research Programme (LZP FLPP) project, three European Agricultural Fund projects and six RSU grants. 8 more projects were submitted by the end of 2022. Research is mainly focused on pharmacology, pharmaceutical chemistry, drug delivery systems, clinical pharmacy, pharmacokinetics, phytochemistry and social pharmacy. The Faculty of Pharmacy is one of the smallest faculties in RSU, however, each year the teaching staff of the Faculty publish their research results in scientific journals. The number of international publications (*SCOPUS* or *Web of Science*) is increasing each year. For example, only FF teaching staff are authors and co-authors of 23 publications in 2019, 30 in 2020 - 2021. Teaching staff publish their scientific results in the field-renowned and important journals such as *British Journal of Clinical Pharmacology*, *Basic and Clinical Pharmacology and Toxicology*, *Toxicology Letters*, *Pharmacological Research*, *Biochemical Journal*, *Nutrients*, *Journal of Infection and Chemotherapy*, *Medicina*, *Molecules*, *Nanomaterials*, *Journal of Ethnopharmacology*, *Plants*, *BMC Medical Education*, *BMJ (Online)*, *Journal of Pharmaceutical Policy and Practice*, etc.

In the **Faculty of Dentistry**, it is a requirement for all academic staff to engage in scientific

research. The staff is involved in both fundamental research projects of the LCS and RSU research projects, as well as in research projects supported by RSU SI. As of 2022, the position of a Research Director was established at RSU Institute of Stomatology, who is responsible for the development of science in the faculty and the Institute of Stomatology.

In **Liepāja branch**, the involvement of teaching staff in research is mainly related to the management of the student research process, as well as individual initiative for participation in the research process. Two lecturers finished their doctoral studies and are in the process of completing their doctoral theses.

Research directions and outcomes of the academic staff involved in the **Doctoral study programme** are the following:

- 1) oriented towards successful implementation of the doctoral study programme;
- 2) related to the individual interests and research activities of the doctoral teaching staff by participating in international and national research projects.

**Teaching staff** constantly **participate in research work**, present reports at scientific conferences, including international conferences. Teaching staff regularly participate in Erasmus + mobility teaching in foreign higher education institutions (for example, Erasmus + visit 22-25.03.2022 to Vilnius University, Faculty of Medicine, Doctoral School). Several lecturers are authors or co-authors of scientific monographs, including on scientific research methodology and scientific writing and dissemination of research results, as well as several collective monographs, mainly in the field of psychology. All the teaching staff prepare international peer-reviewed publications and review scientific papers. Several lecturers work on editorial boards of scientific journals, participate in funded research projects, are experts in various projects. and are members of professional organisations, work and represent international organisations.

The research work of the academic staff is related to the current topics in the fields such as oncology, endocrinology, microbiome, digital interventions, anthropometric parameters and morbidity indicators, epidemiology in an interdisciplinary context, namely, the research conducted by the academic staff is a significant contribution to the development of the field, the development of the study programme and the improvement of the study content. Through research, lecturers bring current developments in the field into their study courses. Teaching staff prepare scientific articles, participate in conferences and workshops, write textbooks and methodological materials.

A large proportion of the teaching staff involved in the doctoral study programme have been granted the status of a science expert in Latvia; to be awarded this status in the field of social sciences, it is necessary to have three double-blind peer-reviewed scientific publications published in a scientific journal or conference proceedings indexed in *SCOPUS* or *Web of Science* database, or included in the *ERIH* + database, including a scientific publication available in Open Access; or two such publications and a scientific monograph. For example, doctoral theses at RSU are supervised only by scientists with the rights of an expert of the Latvian Council of Science, who are continuously conducting research and publishing research results at international level.

Academic staff involved in the implementation of the study direction are actively involved in scientific research; scientific publications are used in the study process (recommended as compulsory or recommended literature in the study course), thereby contributing to the quality and sustainability of the implementation of the study programme.

RSU structural units such as Research Department (information in [Latvian](#), [English](#)), Development and Project Department (information in [Latvian](#), [English](#)) and Technology Transfer Office (information in [Latvian](#), [English](#)) regularly carry out various activities addressing teaching staff

involved in research activities, offer not only specific opportunities for research projects, but also provide practical support for both project preparation and implementation, as well as in connection with industries.

See paragraph 1.5 of Annex 23.1 for more information.

Attached:

Annex 6.2 summarises information, including the scientific activity of the teaching staff.

Annex 14. Information on projects, in which RSU is involved.

Annex 6.4. List of high-ranking publications of the teaching staff according to the journal impact factor IF.

**2.4.5. Specify how the involvement of the students in scientific research and/ or applied research and/or artistic creation activities is promoted. Provide the assessment and description of the involvement of the students of all-level study programmes in the relevant study field in scientific research and/ or applied research and/or artistic creation activities by giving examples of the opportunities offered to and used by the students.**

Students' involvement in scientific research at RSU is generally at the level of students' knowledge, skills, competence and experience.

In general, RSU students may engage in research activities in the following ways:

- vertically integrated projects that are designed to provide students with the opportunity to acquire the knowledge and skills necessary for carrying out research in an in-depth and practical way. More information about the VIP at RSU is available on the website (information in [Latvian](#), [English](#));
- applying for Student Research and Innovation Grants (SRIG) to fund research projects aimed at supporting and motivating RSU students to conduct research. More information on the introduction of SPIG at RSU is available on RSU website (information in [Latvian](#), [English](#));
- developing research skills by participating in PINK and INK programmes of RSU Business Incubator *B-Space* (information in [Latvian](#), [English](#)). More information about the programmes is available on RSU website (information in [Latvian](#), [in English](#));
- participating in student research interest groups in various areas. Currently, 26 research interest groups (information in [Latvian](#), [English](#)) are established and are active;
- applying for financial support from the Student Union to participate in conferences or seminars within or outside the country (more than 10 students receive financial support to participate in conferences each year);
- applying on the student portal to a doctoral student of RSU to assist in the development of a research paper;
- participating in RSU Student Union project "Academy of Researchers" (information is available only in [Latvian](#));
- participating in RSU international scientific conference "Science Week" (information is available only in [English](#));
- using the offer of the One-stop agency of the [Doctoral School](#) for the development of research competences (information in [Latvian](#), [English](#));

- using the [Science Platform](#) for student involvement in scientific projects and research (information in [Latvian](#), [English](#))
- participating with their own research in RSU International Student Conference (ISC), (information available only in [English](#)). *RSU ISC* is an annual project organised by the Student Union, which became international in 2015, and each year it attracts more and more students from different countries. In 2018, the conference reached new heights, taking place over two days and involving more than 270 students with research papers in both in health sector and social sciences. More information about RSU International Student Conferences is available on RSU website (information is available only in [English](#)).

RSU departments are involved in the organisation of RSU International Student Conference. Student research interest groups participate in the creation of workshops. RSU professors are involved in evaluation of the papers, whereas management and structural units are involved in various organisational issues.

Each year, a new team of organisers is created for this project; therefore, each year, the project manager faces a challenge to set a higher standard than the previous year, so the outcome depends on the vision and ambitions of the manager. In 2019 and 2020, it was particularly successful to promote the conference through the conference website, radio interviews, and the distribution of printed materials in RSU and other university buildings. The challenge for the next conference is to attract even more participants with their research papers in both the health and social sciences blocks in order to increase the number of sessions and interested participants.

From April 2019, the annual Research Week is organised (RSU Research Week 2021, RSU Research Week 2019), which includes an international scientific conference for researchers and students. It promotes the development of wider international cooperation, participation in research networks and associations, allows to attract international partners for joint projects, research and publications.

Teaching staff of the StPs of the **Faculty of Rehabilitation** include information on current developments in relevant scientific disciplines in their study courses, as well as familiarise students with their research results. Participation of students in research in the study process takes the form of participation in a Rehabilitation research interest group, development of Bachelor's and Master's theses under the guidance of RF teaching staff, participation in Vertically Integrated projects (VIP) at the Institute of Occupational Safety and Environmental Health, Department of Health Psychology and Pedagogy, involvement in individual research projects carried out by the Department of Rehabilitation.

Students of the Faculty of Pharmacy are actively involved in research work carried out within the department or research projects. Students are motivated to achieve scientific results, as they may publish their research results in scientific journals or participate in RSU or other international conferences, as already mentioned in Section 2.4.2: *Linking scientific research to the study process*. In order to acquire research skills, students are involved in the following research projects:

- 2019 – 2023: European Agricultural Fund. 18-00-A01620-000028 “[Development of anti-parasitic phytopharmaceutical containing extracts of medicinal plants](#)” (3 students).
- 2022-2026: European Agricultural Fund. No 22-00-A01612-000007 “Development of medicinal forms of the leaf extract of tansy, the traditional medicinal herb of Latvia and its effect on the microbiome and anti-parasitic control of the digestive tract of sheep” (3 students).
- 2020 – 2026: [Baltic Biomaterials Centre of Excellence \(BBCE\)](#), second phase, (10 students).

This can be assessed as a significant increase in the number of students who are involved in



research projects and undoubtedly improve the study process, as students share their experience with other students. It also promotes collaborative work between students and teaching staff, cooperation and forge of future scientists, strengthens students' competence in research, courage and proactivity to engage in projects and collaborate with representatives of the sector and academic community. The involvement of students in research projects and scientific work helps the student to understand both the drug research process and the future scientific activities these students are keen to pursue.

Evidence-based knowledge, action and decision-making in the study process are emphasised and taught at the **Faculty of Public Health and Social Welfare** from the start of studies, thus ensuring not only understanding and evidence-based action/practice, but also guided interest in research, which is the basic tool for generating this evidence. During the study process, students are required to collect, synthesize and analyse research data on specific problem issues or interventions within several study courses, summarising the obtained results in the form of presentations, semester papers, etc., which enrich the study process for other students, as well as to carry out their own research within the framework of final papers. There is also a sequential learning of research skills for carrying out research work, which is carried out through a semester-wise arrangement of research-related courses. It is also very important to offer opportunities to students in cooperation with state and municipal institutions, RSU departments to ensure access to research databases for students' scientific research work. For example, in the study programmes "Public Health" this kind of cooperation with the Centre for Disease Prevention and Control (CDPC), RSU Institute for Occupational Safety and Environmental Health and other institutions has been implemented for several years.

With the aim to promote the ability of presenting research results and presenting excellent research results at international scientific conferences, residents of the **Faculty of Residency** have the opportunity to obtain funding for a trip to a scientific conference (participation fee and travel and accommodation expenses).

Also, in order to promote the competence and interest of medical residents to present their research results at an international scientific conference, all RSU medical residents are actively encouraged to participate in RSU International Scientific Conference (organised every 2 years), and a cash prize is awarded to the three best evaluated residents in the selection of research papers for this conference. The cash prize may be used for other scientific activities (a trip for participation in the conference, payment for a scientific publication, etc.).

All graduates of the **Dentistry** study programme are required to develop and defend a scientific research thesis. The thesis is developed and defended during the 9th semester. The thesis topics are divided by the departments of the Faculty of Dentistry. Students have the opportunity to participate in projects already started by the lecturers, as well as in BBCE projects and thus present their work at international student conferences.

In **Liepāja branch**, students are motivated and supported to engage and participate in scientific conferences organised by RSU; research has been conducted in cooperation with the teaching staff and presented at international conferences. Within the framework of their research work, students, guided by the teaching staff, get involved in research of topical issues in the healthcare sector and in offering solutions to them.

Every student of RSU **Faculty of Medicine** is offered ample opportunities to perfect and prove themselves as a competitive and promising young researcher in 36 student research interest groups. The members of the research interest group develop their research papers under guidance of mentors, which are highly valued at student scientific conferences. The members and visitors of the research interest group take part in events organised by Rīga Stradiņš University, such as

Health Week, Young Doctors Academy, Research Week, as well as go on a field trip to one of the regional hospitals in Latvia. The research interest groups have close cooperation with professional associations and departments of doctors in Latvia and the departments.

One of the main tasks of the student research interest group is to promote the development of research papers. Research papers developed within the interest groups were defended at international conferences with very good success and award-winning places. At the end of each year of study, the interest group Olympiads are also held, in which it is possible to test one's knowledge and practical skills. Students carry out research from the first year of study and the most active students participate in the International Morphology Conference organised by the Department of Morphology, which takes place every year. Participation of students in RSU International Student Conference is popular in later years of study.

In the 6th year of study, students have a study course MF\_002 Research Paper included in the medical programme, within which each student has to develop one research paper, carry out theoretical and practical research and defend it successfully. From the end of the 4th year of study, management of the Faculty of Medicine provides explanatory and support work for students so that they successfully start and defend their research paper, which is necessary and is a compulsory part of the study programme.

The aim of the **Doctoral StP** is to create a close synergy between research and studies, allowing to involve students not only in research but also in the work of a scientific organisation, thereby developing the ability to contribute to the development of healthcare sectors by conducting substantial original research, also at the level of peer-reviewed publications.

During their studies, doctoral students reach a level of competence, at which they are able to independently solve significant research or innovation tasks, formulate topical research ideas, plan and structure research projects, including in an international context, for example by participating in research projects. Doctoral students of the doctoral StP "Health Care" are involved in several research projects (including their development):

#### **Sub-programme "Medicine":**

- 2020 - 2021: VPP-COVID-2020/1-0023 "Clinical, biochemical, immunogenetic paradigms of Covid-19 infection and their correlation with socio-demographic, etiological, pathogenetic, diagnostic, therapeutically and prognostically important factors to be included in guidelines" (information in [Latvian](#) and [English](#)) (4 doctoral students).
- 2020 - 2021: VPP-COVID-2020/1-0011 "Impact of COVID-19 on health care system and public health in Latvia; ways in preparing health sector for future epidemics" (information in [Latvian](#) and [English](#)) (2 graduates and 5 doctoral students).
- 2020 - 2022: LCS-2019/1-0056 "Impact of targeted molecular imaging with 18F-PSMA-1007 and 68Ga-PSMA-11 Peta/CT in multimodal evaluation of recurrent prostate cancer" (information in [Latvian](#) and [English](#)) (2 doctoral students).
- 2020-2023: LCS-2019/1-0139 "Dissecting the interplay between intestinal dysbiosis and B cell function in the pathogenesis of immunoglobulin A nephropathy" (information in [Latvian](#) and [English](#)) (1 doctoral student).
- 2019 - 2022: 1.1.1/18/A/096 (ERDF) "Study of factors causing rare inherited diseases using full genome sequencing approach" (information in [Latvian](#), information in English is not available) (1 doctoral student).
- 2020-2021: lzp-2020/2-0111 "Investigating the role of genome instability in male infertility" (in [Latvian](#) and [English](#)) (1 doctoral student).
- 2018 - 2020: lzp-2018/2-0059 "Interplay of environmental and genetic factors in the immunologic mechanisms of thyroid autoimmune diseases" (information in [Latvian](#) and



[English](#)) (1 graduate).

- 2021-2023: lzp-2020/1-0054 “Development of antibacterial autologous fibrin matrices in maxillofacial surgery” (information in [Latvian](#) and [English](#)) (1 doctoral student).
- 2021 – 2022: 46-23/7/2021 “Hereditary angioedema: Study of genetic aetiology” (information in [Latvian](#) and [English](#)) (1 doctoral student).
- 2021 – 2023: 2.2.0/20/I/004 “Support for the involvement of doctoral students in scientific research and studies” (information in [Latvian](#) and [English](#)) (23 doctoral students).

#### **Sub-programme “Pharmacy”:**

- 2021-2023: lzp-2020/1-0050 “Tuberculosis treatment: exploring the perspectives for personalised therapy” (information in [Latvian](#) and [English](#)) (1 doctoral student).
- 2019 – 2023: 18-00-A01620-000028 “Development of anti-parasitic phytoprotective agent containing extracts of medicinal plants” (information in [Latvian](#), [English](#)) (1 doctoral student).
- 2021 – 2023: 2.2.0/20/I/004 “Support for involvement of doctoral students in scientific research and studies” (information in [Latvian](#) and [English](#)) (4 doctoral students).
- 2020 – 2026: Baltic Biomaterials Centre of Excellence (BBCE), second phase (information in [Latvian](#) and [English](#)) (3 doctoral students).

#### **Sub-programme “Psychology”:**

- 2018-2021: National Research Programme INTERFRAME-LV “Challenges and solutions for the development of Latvian State and society in an international context” (information in [Latvian](#) and [English](#)) (3 doctoral students).
- 2019-2020: “ELPA-COG - Impact of long-term physical activity on cognitive dysfunction and depression in seniors” (information in [Latvian](#) and [English](#)) (2 doctoral students).
- 2014-2017: National Research Programme EKOSOC-LV “Reflection on values and behaviour models during social and economic change” (information in [Latvian](#) and [English](#)) (2 doctoral students).
- 2014-2017: National Research Programme BIOMEDICINE “Impact of long-term regular aerobic exercise on cognitive processes – ENABLE-LV” (information in [Latvian](#) and [English](#)) (2 doctoral students).
- 2016-2022: Prisons Administration European Social Fund project No 9.1.3.0/16/I/001 “Improvement of the efficiency of the resocialisation system”, (information in [Latvian](#) and [English](#)) (2 doctoral students).

Synergy with health sector in these projects focuses on promoting public health.

#### **2.4.6. Provide a brief description and assessment of the forms of innovation (for instance, product, process, marketing, and organisational innovation) generally used in the higher education institution, especially in study field subject to the assessment, by giving the respective examples and assessing their impact on the study process.**

Certain boundaries are not defined for RSU pedagogical innovations, but their task is to change the usual way of learning and teaching in order to promote the quality of studies and enrich the learning experience of students. Learning and teaching innovations are a successful use of new ideas when reflecting on traditional learning and teaching approaches and methods, rebuilding them for the needs of the modern world. Consequently, no sign of equality with excellence is put on pedagogical innovations. Innovations can vary from one lecturer to another, while for someone the

same innovation can be something big, for another it is something that has been done for a long time. However, the most important thing is that innovation changes the way of learning and teaching, creating a better study experience for students. Learning and teaching innovations are considered from two perspectives: firstly, methodological innovations, i.e. Promotion of studies based on research, work environment, inquiry, projects, problem situations, and other approaches and methods; second, technological innovation - the use of *H5P*, *Miro*, *Turnitin QuickMark*, 3D printers, augmented and virtual reality and other solutions to develop a technology-enhanced study process. In order to promote the culture of learning and teaching innovation, not only training and exchange of good practice experience sessions are organised at RSU, but also guidelines for learning and teaching innovations have been developed (available only in [Latvian](#)), which are approved by the teaching staff and feedback has been received that the guidelines help teaching staff to understand the full innovation cycle and to start work on the modernisation of their study courses.

## **Mapping**

According to the recommendations of experts during the previous accreditation of the study direction, in 2017-2018 the mapping of StPs was carried out, which has now become part of the StP management process and supports the implementation of student-centred learning and teaching. The mapping of StP includes an analysis of the correlation between the programme content, mainly the learning outcomes to be achieved within the programme, at the level of StP and study courses. The results of the mapping process of the STP - the maps obtained and the observations made are used for the improvement of the study programme, both for the improvement of the course content, outcomes and assessment methods, and for revising the overall plan of the STP.

Initially, the mapping is performed using *MS Excel* mapping tool developed by RSU PIC, which extracts data from descriptions of study courses of the relevant StP in RSU register of study courses. *MS Excel* mapping tool is being improved every year and is currently based on the findings of the mapping process. RSU STP planning IT system is supplemented with the mapping functionality, which was developed within the framework of the European Social Fund specific support target project "Improvement of management processes and modernisation of the StP content at Rīga Stradiņš University". At present, the mapping system is integrated into RSU IT systems and provides mapping of the learning outcomes of StP and study courses, monitoring the coherence of learning outcomes, mapping of StP against professional standards, external laws and regulations, as well as any other documents describing the learning outcomes relevant to the programmes. (e.g. recommendations of international professional associations, UN sustainable Development Goals, etc.).

See Annexes 17.1 and 18.1 for mapping results.

## **Boris and Ināra Teterev Foundation scholarships**

Every semester from the academic year 2014/2015, RSU teaching staff have the opportunity to receive the target scholarship of the Boriss and Inara Tetereva Foundation: for development of new innovative study courses, modernisation of the existing study courses, as well as integration of international experience into RSU.

Activities of the Scholarship can be implemented in two ways: a young or experienced lecturer working individually or for the young lecturer working together with a mentor, where both target scholarship holders are equally responsible for both the process and the quality of the outcome of the work. Four months are provided for the implementation of the activities planned within the framework of the Scholarship, during which the teaching staff introduce innovative learning and teaching solutions, such as gaming activities, digital scenarios and other interactive learning

materials and resources, student peer-to-peer assessment activities, etc., as well as develop new study courses. During the Scholarship, teaching staff receive both pedagogical and technical support and financial rewards for the work done. Within the framework of the study programmes, teaching staff can also receive a special purpose scholarship for attracting guest lecturers to the study course, both for conducting individual lectures and classes, for student and doctoral student counselling, as well as for strengthening the professional continuing education of the teaching staff.

In the academic year 2021/2022, teaching staff of the Faculty of Rehabilitation upgraded the courses “Assessment and Classification of Functional Capacity Limitations” (REK\_075) and “Biopsychosocial Approach in Palliative care in Adults” (REK\_248) within the framework of the Scholarship. Since academic year 2019/ 2020, a new approach has been implemented in the study course “General Rehabilitation” (REK\_032) - the course is implemented at the same time for all RF study programmes, involving also students of the study programme “Social Work” (thus facilitating inter-faculty cooperation), so that mixed small groups can be formed within the course and multi-professional cooperation in rehabilitation can be promoted in the study process. The implementation process of the study course is systematically improved; new teaching staff are involved in the implementation of the course.

In recent years, seven lecturers of the Faculty of Pharmacy have won scholarships and upgraded their study courses. For example, the following courses were upgraded in the academic year 2021/2022: “Pharmaceutical Pharmacology”, “Inorganic Chemistry”, “Qualitative Analysis”, “Pharmacotherapy in the Practice of Pharmacist” and “Quantitative Analysis”. Clinical situations and problems with the use of medication in hospital are also integrated into the course “Pharmacotherapy in the Practice of Pharmacist”. As part of the *Covid-19* pandemic, the programme also included vaccination training that was needed to expand the range of services in pharmacies.

### **RSU Research Portal**

In 2021, a new research activity information system, RSU Research Portal, was introduced at RSU, which lists various scientific results: data on publications, projects, intellectual property, doctoral theses, awards, public speaking and various other research activities (including participation in collegial units, presentations at events of various types and scales, activities of the reviewer and expert, etc.).

The system replaces the method used previously, namely, the list of data that was created and stored in *Microsoft Excel* and *Word*. The possibility of multiple versions is replaced, data quality is improved, time is saved (for both academic and administrative staff, as data do not have to be submitted repeatedly to several units, but access is provided to both sides), and staff no longer need to submit data within a narrow timeframe, but the system can be accessed and data added at any time convenient for the staff member. The system offers a wide range of possibilities, including seeing one’s “impression” or “fingerprint” (the most commonly used term in research results), exposing one’s research results more widely to the public, as well as seeing one’s true network of cooperation at the level of people and organisations (as well as its scale - national or global). The system facilitates the recording and submission of research results to various external institutions, including submission to the Ministry of Education and Science (NZDIS system), creating RSU Annual Report, which is taken as the basis for calculation of basic funding for science.

In order to increase the quality of studies by using advanced technologies and e-solutions, RSU has set the following tasks:

- 1) to supplement the existing RSU Register of Study Courses in order to ensure vertical integration of the content of study courses that will provide a possibility to link topics of study

courses within the framework of the StP supporting continuity of study courses. A dictionary of keywords of study courses and visualisation of keywords will be developed that will show the related topics of the study courses;

- 2) to establish a link between the thematic planning of the course description and the corresponding course in the e-learning environment, where the lecturer would be allowed to choose whether the e-learning course should have the same thematic breakdown as the course description;
- 3) to use RSU library of audio-visual study materials, including descriptions of various learning objects, for example, clinical case descriptions, dissection cases, simulation scenarios, interactive training videos, etc., ensuring systematisation and collection of learning objects, as well as the possibility to share learning objects with other higher education institutions; thus making it easier for students to find the necessary simulation cases, clinical cases, and other learning objects they need.
- 4) to develop a new system that would make it more convenient for students to register for elective study courses available to them at times convenient to them. For the administrative staff, the development of the system would facilitate their work by making it easier and faster to add students to elective courses;
- 5) to improve the Electronic Admission System by reducing the administrative workload, automating manual operations, improving the user interface, adding functionality, etc.

In order to ensure an advanced internal information exchange system for solution of administrative issues, to speed up information circulation and decision-making, as well as to ensure electronic document circulation within RSU, the following tasks for increasing administrative efficiency are set at RSU:

- 1) transition to electronic storage of student files. in accordance with the Cabinet Regulations No 203, student applications and requests and decrees concerning student movement and the study process may be stored only electronically. This will reduce the time taken to process documents, increase the efficiency of administrative work and the quality of data and reduce the use of natural resources;
- 2) purchase of additional HOP modules to provide availability of new e-services: expanding HOP functionality by introducing new e-services for staff, for example, record keeping of business trips, e-instructions, etc.
- 3) develop a quality and process management system. RSU Quality Assurance and Internal Audit Department already successfully uses the process management tool *QPR Enterprise Architect*. In May 2019, an agreement was signed, under which additional licenses were obtained to use the process modelling tool in a more comprehensive manner and to access the latest version of In 2023, the purchase of a new process modelling tool with more extensive functionality is planned, which will allow each RSU employee to view the created processes, adapt the website content to their needs, track changes made and monitor the activities under their responsibility, as well as ensure the accounting and monitoring of quality criteria

When evaluating the innovative solutions implemented to support the study process, it can be said that it is a continuous growth guided by RSU management and relevant departments.

During the re-accreditation stage, the **Faculty of Residency** has actively worked to introduce a modern type of training for students in medical resident education that complies with international medical education standards - simulation-based education, including simulations on living tissues. Current international best practice shows that simulations should be a part of the daily theoretical education of a medical resident, developing skills in simulations prior to the right to work with a patient, with particular emphasis on the branches of invasive medicine.

Residents of all specialties participate in an annual simulation training seminar in cardiopulmonary resuscitation and emergency situations.

In the academic years 2020/2021 and 2021/2022, simulation training, playing out various simulation scenarios was a pilot project, whereas starting from the academic year 2022/2023 onwards, it is included in the specialty programmes of anaesthesiology, resuscitation, paediatric surgery, general practitioner (family medicine), gynaecology, obstetrics, surgery, paediatrics, ophthalmology, trauma, orthopaedics and urology.

Also, training of medical residents on living tissues has been initiated in the Doctors Safe Train Centre at the stage since the previous accreditation. This is theoretical and practical training on living tissue in conditions as close as possible to the real clinical situation. As of the academic year 2022/2023, this training has been established as a compulsory study course and a study component for the specialties of paediatric surgery, general practice, gynaecology, obstetrics, invasive radiology, surgery and urology.

As regards innovative solutions in the study process, for example, the **Faculty of Dentistry** uses special technological equipment to assess students' practical work in the pre-clinic in an absolutely objective and standardised way. Virtual simulators are used to simulate students' practical work and improve the quality of their work. The analysis of students' practical and test work records at the pre-clinical stage is used. From autumn 2022, a digital planning room started to be used in the course of prosthetic dentistry and orthodontics.

During the study process in **Liepāja branch** in cooperation with healthcare institutions of Kurzeme region, the Environment and Health Department of Liepāja State city, educational institutions of the South Kurzeme and the City of Liepāja, students are involved in educating different age groups of society. A special lecture and class cycle “My choice - medicine” was created, which has been implemented for the 3rd year. The aim of these activities is to improve students' cooperation, communication and education skills, as well as to ensure the recognition of Liepāja branch in the region and attract potential students.

RSU and the **Department of Doctoral Studies** coordinate the ensuring of Latvia's participation in the European Research Infrastructure Consortium EATRIS-ERIC. The National Node of Latvia coordinated by RSU will act as a national infrastructure information, knowledge, monitoring and data platform available to all researchers working in the field of biomedical research to strengthen Latvia's role in medical and biomedical research.

The feasibility study process identified the following potential EATRIS hubs in Latvia:

1. Rīga Stradiņš University,
2. University of Latvia (LU),
3. Latvian Institute of Organic Synthesis (OSI),
4. Latvian Biomedical Research and Study Centre (LBMC).

An agreement on the establishment of the EATRIS national hub was signed in 2020. A very important element of the EATRIS offer is the high-level courses in translational medical science, which are offered every two years and the participating countries are entitled to a certain number of places. Similar opportunities are offered by other European research infrastructure consortia in the field of biomedicine, in which Latvia participates: BBMRI (Biobanking and Molecular Resources) ERIC, INSTRUCT (Structural Biology) ERIC - particularly interesting for doctoral students in pharmacy, OPENSREEN (Medical Chemistry and Drug Screening) ERIC - essential for doctoral students in pharmacy. Cooperation in the field of methodology should also be developed with other ESFRI platforms (ELIXIR, MIRRI) in accordance with the integration of Latvia into them, as well as with the involvement of Latvia in other ERIC consortia, such as SHARE in the field of social

medicine. It is the opportunity to access information on new technologies and methodologies that is essential for doctoral students to achieve novelty, and the opportunities offered by ERIC are very broad and important. Access to the infrastructure itself is possible within the ERIC and, if implemented within the Integrated Framework Programme Activities projects, does not require additional funding and travel costs are covered as needed.

Since 2008, RSU has had the Technology Transfer Office (TTO), which aims to establish and maintain external relations with the private sector. The TTO promotes RSU research capacity, deals with the protection and management of intellectual property, and organises cooperation with the private sector (commissioned research, commercialisation offers to companies, contact bourses, exhibitions, etc.).

## **2.5. Cooperation and Internationalisation**

**2.5.1. Provide the assessment as to how the cooperation with different institutions from Latvia (higher education institutions/ colleges, employers, employers' organisations, municipalities, non-governmental organisations, scientific institutes, etc.) within the study field contributes to the achievement of the aims and learning outcomes of the study field. Specify the criteria by which the cooperation partners for the study field and the relevant study programmes are selected and how the cooperation is organised by describing the cooperation with employers. In addition, specify the mechanism for the attraction of the cooperation partners.**

RSU has implemented a variety of growth activities and achieved high academic and scientific results, as shown by: (1) *Times Higher Education (THE) World University Rankings* – ranks 601th-800th among the world's top universities and is 2nd in the Baltic States; (2) RSU research activity has received a high international assessment “4”; but (3) in 2021, it has become one of the four research universities in Latvia<sup>[1]</sup>.

RSU **International Department** (ID) has established an extensive network of partner higher education institutions in Europe. Partner higher education institutions are regularly informed on *Erasmus* exchange possibilities at RSU, including the exchange of visiting teaching staff. In addition to electronic communication, every year RSU ID organises *Erasmus+* International Week, the programme of which includes several professional networking events. Within the framework of this event, contacts are established with new *Erasmus+* cooperation partners.

In addition to these events organised by RSU, representatives of RSU ID regularly attend annual events of professional international associations with a purpose to ensure exchanges, including visiting teaching. For example, RSU participates in networking exhibitions organised by the *European Association of Erasmus Coordinators* and *European Association for International Education*.

RSU ID supports *Erasmus* visiting teaching visits both before the visiting teaching staff arrives in Riga and during the period of their visiting teaching (for example, administers documentation of the visiting teaching, develops the plan of activities, assists in the process of the visit, etc.).

Current development of cooperation and internationalisation is in line with the objectives of the directions and the plan and is generally considered sufficient.

In order to implement the StP, RSU concluded cooperation agreements with other institutions.

RSU students have the opportunity to go on exchange studies or international placement for one semester or the entire academic year abroad with an *Erasmus+* scholarship. The programme covers all StPs, as well as all levels of higher education, including doctoral studies (information in [Latvian](#), [English](#)).

There is continuous cooperation with employers on several levels. In order to facilitate cooperation with employers' organisations, their participation in educating prospective professionals, as well as to increase the competitiveness of RSU students on the labour market, a Career Week is organised in the university each year. During this week presentations of employers' organisations are made with representatives of employers telling about career opportunities in the represented organisation and offering current vacancies to RSU graduates and students, as well as giving practical advice on how to succeed in the labour market.

National Examination Boards and Committees for defence of Master and Bachelor's theses comprise at least 50% of employers: it is established by the Cabinet Regulations No 481 of the Republic of Latvia, and the compliance with these Regulations is strictly controlled at RSU.

The *Erasmus +* programme mobility activity has been implemented among the countries of the programme. In total, more than 200 bilateral cooperation agreements have been signed, providing mobility of the students and staff in all cycles of studies: during Bachelor's, Master's, and doctoral studies. The partner universities are selected on the basis of information available on equivalent StPs and the language of instruction. One of the main conditions is the coordination of study courses during the student exchange programme in order to be able to validate the study courses and to add them to the Diploma supplement of the corresponding StP of RSU. As a result, a full study process is provided, complemented by experience from abroad. The *Erasmus +* programme mobility activity has been implemented among the countries of the programme.

RSU has been positively evaluated in the international environment. International university ranking *QS World University Rankings 2022* included RSU among the 1,000 best-performing universities in the world, especially appreciating the ability of the university to attract international students. Similarly, RSU regularly receives the highest rating "A" in various categories in the *U-Multirank* rating of European Union higher education institutions (information about ratings in [Latvian](#), [English](#)).

The university has also received other international recognitions. For example, as mentioned above, it was recognised as a student-centred higher education institution in the evaluation *PASCL* of the European Association of Students. In their 2016 study, the World Bank experts also praised the involvement of students in RSU decision-making, the presence of international students and strategic planning at the university.

The extensive network of *Erasmus* partner higher education institutions also proves the international recognition of RSU. In 2017, RSU received recognition from the National Education and Development Agency for the successful implementation of the European Commission's *Erasmus* programme.

Most of the teaching staff of the **Faculty of Rehabilitation** are professionals in their field of specialisation and carry out their lecturing work concurrently with their work in providing rehabilitation services in various healthcare institutions. For example, Dace Stirāne (National Rehabilitation Centre "Vaivari"), Ilga Mihejeva (Riga East Clinical University Hospital), Lolita Cibule (Riga Health Centre), etc. The teaching staff are members of their professional associations; they are also involved in the organisation and implementation of continuing professional education activities. In 2019, the RF in cooperation with the Latvian Association of Rehabilitation Professional



Organisations (LRPOA) launched the National Rehabilitation Congress of Latvia, which is held regularly every other year. Employers' representatives are invited to take part in National Examination Boards (various medical institutions, for example, Hospitals - RAKUS, PKUS, BKUS, Rehabilitation Centre - NRC Vaivari, KRC Jaunķemeri, RC Baltezers, BRC *Mēs esam līdžās [We are side by side]*, etc.), as well as representatives of professional associations - Latvian Physiotherapy Association, Latvian Association of Occupational Therapists, etc. Teaching staff of the FR participate as experts in working groups of the Ministries of the Republic of Latvia (Ministry of Health, Ministry of Welfare, Ministry of Education and Science) on issues related to organisation of rehabilitation and improvement of services, assessment of work capacity and improvement of services for people with functional limitations, inclusive education. Similarly, the teaching staff of the FR participate as experts in various cooperation partner projects. The Faculty of Rehabilitation has very close cooperation with various medical, social services and educational institutions in Latvia in providing placements for the students of the Faculty. The cooperation is confirmed by contracts - 97 contracts were recorded on 29.04.22 (see Annex 9.2).

The staff and students of the **Faculty of Pharmacy** are involved in several projects that take place in cooperation with other universities of Latvia - RTU, LLU, as well as with research institutes (information about the projects is available on the project websites in ([Latvian](#) and [English](#))). The projects provide opportunities to develop research skills. Cooperation with pharmaceutical manufacturers in Latvia is also taking place within the study courses - representatives of manufacturers are involved in teaching courses, as well as field-trips and training are provided in companies (in the study course "Industrial Dosage Form Technologies"). The lecturers are also specialists from the sector: B. Galviņa, Director of Production of Finished Dosage Forms at "Grindex"; E. Poplavska - Head of the Department of Medicinal Product Registration of the State Agency of Medicines; M. Iljašenko, Medical and Clinical Research specialist at "Olainfarm"; N.Krauja, Board Member at "Apotheka" Ltd and others. Cooperation with employers provides students with field trips, training and placement opportunities at pharmaceutical companies. Every year JSC "Olainfarm" supports the best pharmaceutical students with scholarships and offers placement locations in the company.

The **Faculty of Public Health and Social Welfare** has eight quality councils, which include representatives of leading employers' institutions, to ensure the quality of its programmes within the study direction. All issues related to the particular study programme are updated, reviewed and discussed in the Quality Councils before being submitted to the Faculty Council for approval, thus successfully integrating employers' views and recommendations for the improvement of the study process. Cooperation with institutions takes place also outside the framework of the Quality Council, through the organisation of placements within the framework of placement agreements, addressing topical issues and developing intersectoral cooperation. For example, the aforementioned cooperation with the Centre for Disease Prevention and Control (CDPC) and RSU Institute for Occupational Safety and Environmental Health and other institutions, and inviting employers' representatives to National Examination Boards.

The **Faculty of Residency** establishes and maintains targeted cooperation partnerships in training of medical residents with medical institutions in Latvia. The cooperation is implemented both by attracting medical institutions - leading centres of excellence in a specific field of medicine, and by providing resident employers - regional medical institutions, outpatient medical institutions.

Residents are trained in clinical university hospitals, specialised hospitals and in various centres of excellence in the relevant field. For example, ophthalmology residents study also at the [Latvian American Eye Center](#), rheumatology residents at [Orto clinic](#), sports physicians at the [Sports Laboratory](#), laboratory doctors at the [Central Laboratory](#) and [E. Gulbis Laboratory](#), etc. Where possible, residents who have employment relationship with a regional medical institution or an



outpatient medical institution learn study courses also at their place of work in addition to the study process in the leading institution of the field (for example, a clinical university hospital or another medical institution, which is a centre of excellence in the relevant field). The Faculty has concluded cooperation agreements on training residents with more than 100 different medical institutions. (clinical university hospitals, specialised hospitals, regional medical institutions, private medical institutions, general practitioner's surgeries, etc.).

Successful cooperation has also been established with the employers' institution representing the sector, the Healthcare Employers' Association (VADDA). In October 2021, representatives of the Faculty of Residency gave a presentation on the problems and possible solutions for the training of healthcare professionals at the conference "Challenges of the Healthcare System" organised by the VADDA. Representatives of the VADDA also participated in the round table discussion on the issues related to the implementation of the residency study process in the country, organised by the Faculty of Residency in April 2022. A total of 65 participants from 34 different healthcare institutions took part in the discussion, and the Dean of the Faculty of Residency, a representative of the Latvian Association of Young Doctors, a representative of the clinical university hospital, a representative of the regional medical institution, a representative of the private medical institution and a representative of the Ministry of Health gave their opinion in the discussion/ The Ministry of Health was informed about the problems identified during the discussion and asked to consider solutions at national level to address the problems.

Within the framework of the study direction, the **Faculty of Dentistry** cooperates with institutions from Latvia and abroad (higher education institutions/colleges, employers, employers' organisations, municipalities, non-governmental organisations, research institutes, etc.), which contributes to the achievement of the goals and learning outcomes of the direction and its corresponding study programmes. Cooperation partners are selected according to the specific character of the study direction and its study programmes.

The Faculty of Dentistry cooperates with the Latvian Dental Association (LDA), which provides certification for dental graduates. Together with the LDA, a professional standard is being created and, in turn, a study programme is being developed according to the professional standard. Topical issues related to health care are addressed together with the LDA. RSU teaching staff participate in continuing education courses, where they train LDA members in the use of the latest technologies.

Latvian Medical Association - certification and professional issues related to compliance with laws and regulations.

Health Inspectorate - a controlling body that ensures that the premises and infrastructure of the Faculty of Dentistry comply with national legislation.

Liepāja and Daugavpils municipalities - student education and placement for students in municipal institutions.

Major private dental clinics that take RSU students for placement.

**Liepāja branch** has developed a cooperation model with Kurzeme healthcare institutions for work-based learning and provision of placements. These include Liepāja Regional Hospital, health and social care institutions in Ventspils, Kuldīga, Talsi, Saldus, Aizpute and Priekule. A long-standing cooperation process with public organisations has been developed - Diabetes Association, Society of the Blind, Addiction Prevention Centre, Liepāja Youth House.

Science infrastructure is an important component of the **doctoral study programme**: National Research Centre for Public Health and Clinical Medicine, the emerging Laboratory of Finished Dosage Forms (GZFL), the Baltic Biomaterials Centre of Excellence and the Psychology Laboratory.

## Branch of Medical sciences.

In recent years, RSU has effectively developed its medical research infrastructure, which provides doctoral students with modern research equipment for use in their research. For example:

- Institute of Oncology, including Laboratory of Molecular Genetics;
- The Science Hub “Kleisti”, which includes the Institute of Microbiology and Virology,
- Labour Safety and Environmental Health Institute,
- Laboratory of Biochemistry,
- Joint Laboratory of Clinical Immunology and Immunogenetics and Biomechanics Laboratory;
- Institute of Public Health.

Whereas, the aim of the Technology Transfer Office is to establish and maintain external relations with the private sector and to promote RSU research capacity, in which RSU doctoral students can obtain practical information about contact bourses, expanding scientific networking.

RSU is a leading partner of the **National Research Centre for Public Health and Clinical Medicine** (Centre). The Centre serves as a cooperation framework for concentrating of scientific resources for research at European level. The partners of the Centre are Rīga Stradiņš University, the University of Latvia and Pauls Stradiņš Clinical University Hospital. The partners of the Centre have established mutually complementary research infrastructures, the use of which is stipulated in the Cooperation Agreement, in line with their research aims and objectives

### Infrastructure of RSU part of the Centre:

**The Science Hub “Kleisti”** - Institute of Microbiology and Virology, Institute for Occupational Safety and Environmental Health, Laboratory of Biochemistry, Joint Laboratory of Clinical Immunology and Immunogenetics and Biomechanics Laboratory, which are spread over the area of 2704 m<sup>2</sup>, providing work for 64 researchers and laboratory staff. The Centre has installed 2 173 185 EUR worth of scientific equipment and apparatus.

**RSU Institute of Oncology** includes several research departments - breast tumours, hereditary cancer research and others. The main sets of equipment and facilities also correspond to the research areas: confocal microscope, laser, cell and cell culture research kit, molecular biology kit, biotechnology kit, equipment for measuring factors affecting occupational and environmental health, epigenetic research kit, genetic analysis kit, proteome analysis unit, pathology research unit, *FRET* system for direct immunology research, *Multiplex Luminex 200*, computer software package for systems medicine *genXplain*, etc.

**Baltic Biomaterials Centre of Excellence (BBCE):** The BBCE project aims to establish a cooperation-based Baltic Biomaterials Centre of Excellence, bringing together outstanding research institutions from abroad: *AO Research Institute Davos* (Switzerland), the Biomaterials Centre of Friedrich-Alexander Erlangen-Nuremberg University (Germany) and from Latvia: RTU Rudolfs Cimdins Riga Biomaterials Innovation and Development Centre, the Latvian Institute of Organic Synthesis and Rīga Stradiņš University. The project will bring together expertise and infrastructure from different fields to create a strong science centre for comprehensive biomaterials research. The Centre will offer the industry a wide range of services, ranging from material development in the laboratory to clinical research. The development is planned not only to increase scientific excellence, but also to involve industry and other scientific institutions, thus facilitating future technology transfer and the introduction of new products into the market.

## Branch of Pharmaceutical sciences.

To enable the development of pharmaceutical science, new premises are allocated and new equipment is purchased and new research areas in pharmacy are being developed. Scientific

cooperation with LLU has been established, providing for the use of medicinal plants in the development of veterinary dosage forms.

Currently, with the co-financing of the European Regional Development Fund (ERDF), RSU is developing the pharmaceutical research infrastructure, the Laboratory of Finished Dosage Forms, which will provide research and training of students in the field of industrial pharmaceutical technology. The Laboratory will be equipped with two functional equipment units:

- a solid dosage form development unit with equipment for the preparation and packaging of powders, granules, tablets and capsules;
- a standardisation block with equipment for study of raw materials, intermediate products and finished products and materials, as well as for quality control by chromatographic, spectrometric and other analytical methods.

The academic staff of the Faculty of Pharmacy is actively involved in various research projects. Involvement in projects contributes to the scientific competence, growth and fulfilment of criteria of the academic staff, as well as to the involvement of students in research projects in order to promote the development of student research projects, as well as to raise students' awareness of research activity.

At present, the faculty staff and students are involved in several projects (information on projects is available on the project websites in ([Latvian](#) and [English](#))).

### **Branch of psychology.**

To ensure the best quality of the study process, RSU Department of Health Psychology and Pedagogy [maintains close relations with other higher education institutions in Latvia and abroad](#), including those in the United States of America, Greece, Italy, Israel, Cyprus, Russia, the United Kingdom, Lithuania, the Netherlands, Poland and Germany. Good international relations provide an opportunity to learn from the experience of other countries, to acquire new methods and technologies for improving the quality of studies.

It is important that the doctoral theses are developed in [cooperation with various organisations, healthcare institutions](#), including Riga East Clinical University Hospital (RAKUS), Riga Psychiatry and Narcology Centre (RPNC), as well as the National Armed Forces of Latvia (NAF). Two foreign professors also supervise doctoral theses and two advise in the doctoral study programme "Psychology".

In order to ensure the development, adaptation and validation of psychological research and assessment tools that meet the requirements of modern science, as well as to provide advice on issues of psychometry to RSU teaching staff and students, RSU operates a Psychology Laboratory (information in [Latvian](#) and [English](#)).

In order to develop students' practical work skills, to improve their competence and skills in working in a real clinical environment, to fulfil the increasing demands and expectations of the health sector from a modern medical graduate, as well as to prepare students for a successful next stage of studies – residency, and to implement the Medical study programme in accordance with the content principles of European and developed countries; the 6th year of study at the Faculty of Medicine is largely dedicated to clinical placement. For 18-weeks, students are placed in healthcare settings all over Latvia, where they undertake rotation placements in three main blocks: Internal Medicine, Surgery and the free elective rotation (each lasting 6 weeks). Over the last 5 years, a wide network of cooperation with medical institutions and doctors' surgeries has been developed throughout Latvia, where students are placed in placements. In total, rotation placements are implemented in more than 142 places: university clinics (RAKUS, PSKUS, BSKUS), all regional hospitals, specialised

medical institutions (e.g. Jelgava Psychoneurological Hospital, Daugavpils Psychoneurological Hospital, E.Gulbis Laboratory, VSIA Pathology Centre), outpatient medical centres (VC-4, VCA and others), many general practitioners' surgeries in Riga and regions, providing students with the opportunity to get acquainted with all levels of the medical sector in Latvia, while placement providers from each branch of health sector can evaluate the knowledge and skills of our faculty students. The Faculty of Medicine has created a special position: a Clinical Placement Coordinator, who regularly evaluates the quality of placement in medical institutions on the spot, as well as identifies new placement locations in accordance with RSU academic requirements. Once a year, RSU also organises a practical conference for cooperation medical institutions, where topicalities and necessary improvements as well as RSU academic requirements for placement implementation and management are discussed.

International students also complete a clinical practical year of study, during which they spend 17 weeks in outpatient and inpatient medical institutions, as well as general practitioner's surgeries in their home countries, RSU cooperation clinics abroad or stay in Latvia. Approximately 20% of students stay in Latvia (partially or fully) each semester (autumn and winter admission). There is an average of 135 students from abroad each semester.

RSU international students are given the opportunity to: 1) find a placement location in their home country, 2) go to RSU cooperation clinics abroad or 3) complete the placement in Latvia.

RSU, in cooperation with medical institutions in Latvia and abroad, actively identifies placement locations and provides all the 5th year students with the opportunity to apply one semester before the start of the placement, when the student can apply for the placement offered by medical institutions. If these are RSU cooperation institutions, RSU endeavours to schedule placements in accordance with the profiles preferred by students and the facilities provided by the institution. The condition is that if a student finds the placement individually, a scholarship of 40 EUR per week of placement is paid. Thus, RSU tries to stimulate students' initiative to find potential future jobs, get acquainted with the requirements of the local market and reduce the burden on the administrative staff of the University to organise placements in Latvia. RSU currently has cooperation hospitals in Germany, Italy, Portugal and Israel. The principles of cooperation are stipulated in the concluded contracts, which specify the number of students, the number of placements the hospital is prepared to provide in specific profiles, as well as the conditions provided for the students.

Twice an academic year, a survey of students on the procedure of placements is carried out, covering a wide range of issues, including the assessment of the knowledge acquired so far in the programme and its compliance with the real requirements of the working environment, and recommendations for remedial activities. The number of responding students is high, and remedial activities have already been introduced, for example, additional preparatory courses before the start of the rotation placement "Emergency Situations" and "Electronic National Healthcare Information Systems in Latvia". Also, the survey of placement supervisors is conducted twice a year to assess the preparedness and compliance of the Faculty students with the requirements and expectations of employers. In the placement rotations, students fill in a special Portfolio, in which, besides the patients treated, manipulations and other information, both the student and the placement supervisor provide a mutually evaluable and progress report. The rotations conclude with three placement rotation examinations, the assessment of which is cumulative and 50% of which consists of the assessment by the placement supervisor. Special guidelines for assessment on a 10-point grading scale have been prepared for placement supervisors, which also helps to bring practitioners with no previous teaching experience closer to the academic environment.

In order to bring the students of the MF closer to the current needs of the Latvian health sector at present and in the next decade, out of 18 weeks of placement rotations, the student is obliged to

spend 2 weeks outside Riga, in the region and 2 weeks in a GP surgery.

It should be noted that the National Examination Board of the Medical programme is traditionally chaired by a representative of the employers. For the last few years, it has been Valts Ābols, the Head of the Association of Large Hospitals, the Chair of Board of BKUS. Participation in the National Examination provides an opportunity for the employers' representative to assess the compliance of the graduates' knowledge, skills and competences with the requirements of the labour market, to make recommendations if any issues need to be updated in the study process.

[1] <https://likumi.lv/ta/id/326218-par-valsts-augstskolu-tipiem>

**2.5.2. Provide the assessment as to how the cooperation with different institutions from abroad (higher education institutions/ colleges, employers, employers' organisations, municipalities, non-governmental organisations, scientific institutes, etc.) within the study field contributes to the achievement of the aims and learning outcomes of the study field. Specify the criteria by which the cooperation partners suitable for the study field and the relevant study programmes are selected and how the cooperation is organised by describing the cooperation with employers. In addition, specify the mechanism for the attraction of the cooperation partners.**

Representatives of the study programmes of the **Faculty of Rehabilitation** participate in the activities of various international organisations focused on higher education in a particular profession (involvement in higher education networks), for example, in occupational therapy - European Network of Occupational Therapy in Higher Education (*ENOTHE*)<sup>[1]</sup>, in physiotherapy - European Network of Physiotherapy in Higher Education (*ENPHE*)<sup>[2]</sup>, in technical orthopaedics - International Society for Prosthetics and Orthotics (*ISPO*)<sup>[3]</sup>. Teaching staff of the Faculty of Rehabilitation also participate in research networks, such as *COST* actions CA16226<sup>[4]</sup> and CA19136<sup>[5]</sup>.

The staff and students of the **Faculty of Pharmacy** are involved in several projects that take place in cooperation with AO Research Institute in Davos, Switzerland and Friedrich-Alexander Erlangen-Nuremberg University in Germany. Information on projects is available on the project websites in ([Latvian](#) and [English](#)). Close cooperation in both academic and scientific work has been established with the University of Pisa in Italy and the University of Helsinki in Finland. The projects provide opportunities for students to develop their research skills. Foreign cooperation partners are selected according to the priority and topical scientific areas in pharmacy and health care, evaluating the scientific indicators of partners and the experience of academic work.

Since 2018, the **Faculty of Public Health and Social Welfare** (SVSLF) had been delegated the functions of the WHO Cooperation Centre for Professional Health Education with the approval of the Ministry of Health of the Republic of Latvia and the World Health Organisation (WHO), which means high appreciation of the education provided and the opportunity not only to network for the development of the field, but also share the accumulated experience at the international level; the activities of the Cooperation Centre include providing support for the improvement and transformation of professional health education and training at the international level.

The SVSLF is also a Member of the Association of Schools of Public Health in the European Region

(ASPHER), which provides an opportunity to implement and develop studies in the field of public health that comply with international approach and practice.

The SVSLF is establishing and developing cooperation with a number of higher education institutions, such as Arcada University of Applied Sciences (Finland), Mälardalen University (Sweden), Kristiania University College (Norway), Medical University of Białystok (Poland), Lithuanian University of Health Sciences (Lithuania), Başkent University BU (Turkey), Medical University of Plovdiv (Bulgaria), University of Applied Sciences Wiener Neustadt (Austria), etc., in the preparation and implementation of international projects in education, science and mobility.

Cooperation partners of the **Faculty of Dentistry**:

- *ADEE (Association of Dental Education in Europe)* - RSU Faculty of Dentistry (ZF) is a member and participates in the development of laws and regulations and recommendations related to dental education.
- *IADR (International Association of Dental Research)* - RSU ZF is a member and participates in the organisation's events.
- Professional associations of dental auxiliary specialties and sub-specialties which promote professional education and the development of science in RSU ZF.
- *RCS (Royal College of Surgeons)* - cooperation with the United Kingdom and Commonwealth countries in dentistry.
- International cooperation within BBCE with German and Swiss scientific institutions. In the field of scientific research, there is cooperation with universities in Rostock, Malmö, Cardiff, Oulu and others.
- RSU Institute of Stomatology

**Liepāja branch** in relation to foreign institutions, cooperates with various healthcare and medical higher education institutions in France and Switzerland, regularly ensuring student mobility and the study process in the work environment by providing placements.

RSU currently has cooperation agreements with hospitals in Germany, Italy, Portugal and Israel. The cooperation is implemented in two ways:

In providing the rotation placement for the 6th year international students of the Faculty of Medicine - cooperation agreements specify the number of students, the number of placements the hospital is ready to provide in specific clinical profiles, the conditions for students, remuneration issues and others. Rotation placements are organised in accordance with the requirements of RSU MF programme. Students are free to apply for placement in these hospitals, after which a survey is conducted for quality improvement purposes. In this way, RSU tries to stimulate the opportunities for international students to undertake placement in their home countries, to find a potential workplace in the future, to get acquainted with local healthcare institutions. For example, 4 international students underwent full or partial rotation placement in the 6th year of study in the cooperation hospitals in Bremen (Nord gGmbH, Klinikverbund Bremen) in the autumn semester of 2022.

MF provided international students of 4th and 5th year of study with some clinical study courses with the aim to implement practical classes in English in accordance with the content and quality criteria of RSU accredited programme "Medicine". Students are free to apply for practical training in these hospitals with the selection criterion being the best average mark, given that the number of students in one group is limited. For example, at the Elbe Clinic in Stade, Germany, in autumn 2022, one group of students of 9th semester trained in neurology, neurosurgery, anaesthesiology, intensive care and toxicology. Whereas, another group of students from the 7th semester mastered orthopaedics and psychiatry. The final examinations with very good results were taken at RSU. The

aim of such cooperation is to enrich students' clinical experience abroad and to get to know the healthcare system of the home country in a timely manner.

The cooperation hospitals are selected on the basis of the potential partners' ability to provide placement and clinical training programmes in accordance with the content and quality criteria of RSU accredited programme "Medicine", as well as feedback from the students.

RSU currently has cooperation agreements with hospitals in Germany, Italy, Portugal and Israel.

The cooperation is implemented in two ways:

1) in the provision of rotation placement for the 6th year international students of the Faculty of Medicine - the cooperation agreements specify the number of students the hospital is ready to provide placements for in the specific clinical profiles, the conditions for students, remuneration issues and others. Rotation placements are organised in accordance with the requirements of RSU MF programme. Students are free to apply for placement in these hospitals, after which a survey is also conducted for quality improvement purposes. In this way, RSU tries to stimulate the opportunities for international students to undertake placement in their home countries, to find a potential workplace in the future, to get acquainted with local healthcare institutions. For example, 4 international students underwent full or partial rotation placement in the 6th year of study in the cooperation hospitals in Bremen (Nord gGmbH, Klinikverbund Bremen) in the autumn semester 2022.

2) The 4th and 5th year international students of the Faculty of Medicine, in the provision of certain clinical courses with the aim to implement practical classes in English in accordance with the content and quality criteria of RSU accredited programme "Medicine". Students are free to apply for practical training in these hospitals with the selection criterion being the best average mark, given that the number of students in one group is limited. For example, at the Elbe Clinic in Stade, Germany, in autumn 2022, one group of students of 9th semester trained in neurology, neurosurgery, anaesthesiology, intensive care and toxicology. Whereas, another group of students from the 7th semester mastered orthopaedics and psychiatry. The final examinations with very good results were taken at RSU. The aim of such cooperation is to enrich students' clinical experience abroad and to get acquainted with the healthcare system of the home country in a timely manner.

The cooperation hospitals are selected on the basis of the potential partners' ability to provide placement and clinical training programmes in accordance with the content and quality criteria of RSU accredited programme "Medicine", as well as feedback from the students.

Attached:

Annex 9.2. Information on cooperation agreements concluded with other institutions.

[1] <https://enothe.eu/>

[2] <https://www.enphe.org/en>

[3] <https://www.ispoint.org/>

[4] <https://www.cost.eu/actions/CA16226/#Management%20Committee>

[5] <https://www.cost.eu/actions/CA19136/>

**2.5.3. Specify the system or mechanisms, which are used to attract the students and the teaching staff from abroad. Provide the assessment of the incoming and outgoing mobility of the teaching staff in the reporting period, the mobility dynamics, and the issues which the higher education institution/ college faces with regard to the mobility of the teaching staff.**

The implementation of study programmes of the **Faculty of Rehabilitation** includes cooperation with other higher education institutions in Latvia and abroad, including mobility of the teaching staff, student mobility and intensive programmes (cooperation within *Erasmus+*, *Nordplus* projects), that ensure the circulation of new knowledge and contribute to the quality and competitiveness of the programme content. Cooperation with the visiting professor *Katharina Sunnerhagen Stiebrand* from the University of Gothenburg (Sweden) is ongoing.

International students are admitted to the **Faculty of Dentistry** in accordance with the admissions requirements. The attraction of teaching staff takes place on the basis of professional cooperation. Both outgoing and incoming mobility takes place within the Erasmus programme. In recent years, interest in mobility has decreased due to the role of the pandemic and reduced funding; however, interest is recovering due to the possibilities.

To promote **international mobility and research development** at RSU, Erasmus + projects have been established. Erasmus + cooperation agreements for the exchange of students and staff with 45 universities in various European countries (Austria, Belgium, Czech Republic, Denmark, Estonia, Lithuania, France, Poland, Slovenia, Spain, Germany, etc.) have been concluded in the study direction "Health Care" until the end of 2027. Students can also exchange placements with institutions without cooperation agreements. RSU staff can go on exchange to institutions without cooperation agreements, as well as to all partner universities of the study direction "Health Care" (detailed information on Erasmus + cooperation agreements in the study direction "Health Care" is given in Annex 7). In March 2022, an Erasmus+ project application "*JOIN IT! Peer-to-peer support to build social connection and wellbeing*" (KA220-YOU - Cooperation partnerships in youth) was prepared, in which RSU as a partner organisation participates in the project together with universities of Italy, Spain, Germany and Croatia. The aim of the project is to identify solutions and resources to reduce social isolation and loneliness of young Europeans (19-25 years old).

An important opportunity for doctoral students to engage in mobility and contribute to the implementation of the scientific programme is the **participation in COST Actions**, which are recognised as scientifically innovative, and aim at supporting early-stage researchers to cooperate with leading institutions and research groups. RSU doctoral students participate in 24 COST Actions, namely, the *Cost Action PhysAgeNet* working group to identify biomarkers of physical activity (product: systematic review), to create a database of these markers (product: *Open Source* database), and to develop guidelines for conducting intervention research and sampling in technology-enabled physical activity research (planned products: two systematic reports and guidelines).

In addition, grants for young researchers to attend conferences are available (facilitates networking). Student mobility within the framework of the doctoral grant has decreased after 2019 due to various COVID-19 restrictions and students did not choose to attend international conferences on site, but instead attended webinars organised by international conferences without using the doctoral grant. There are several challenges to student mobility, the most important of them are related to family circumstances, as well as work, for example, for those doctoral students who are practising as specialists in their field (for example, they have their own practice), it is



problematic to temporarily stop providing services to their clients/patients.

In addition to the doctoral studies, each doctoral student has the opportunity to participate in the events of the Doctoral School and to attend courses by the invited visiting lecturers. Visiting lecturers are invited to participate in the implementation of study courses: for example, it is planned to involve Angelos Kassianos from Cyprus University of Technology in the implementation of the seminars for doctoral students and to develop a study course “Oncopsychology” and offer it to all interested students.

### **Assessment of the outgoing mobility of the teaching staff during the reporting period.**

Outgoing mobility of the teaching staff of RSU is implemented within the *Erasmus+* programme, bilateral cooperation and several EU-funded projects. Cooperation agreements have been concluded with other higher education institutions of the European Union, where the content of studies is equivalent to that of StP, in order to ensure full cooperation. Before leaving for a teaching visit, the teaching staff contact the receiving higher education institution in order to develop the lecture plan of suitable content. Main condition of a teaching visit within *Erasmus+*: the lecturer must provide a minimum of eight academic hours which can be either lectures or seminars. The guest lectures must be given in accordance with the Common European Framework of Reference for Languages.

### **Assessment of the incoming mobility of the teaching staff during the reporting period.**

For example, researchers and teaching staff who are cooperation partners in various RSU projects are invited to the study programme “Pharmacy”. In recent years, lectures/classes have been given to students by specialists from Italy, Estonia, Australia, Lithuania, Finland, Australia and USA.

Attached:

Annex 8.1 Statistical data on international students and teaching staff

Annex 8.2 Statistics on student mobility (indicating study programme)

## **2.6. Implementation of the Recommendations Received During the Previous Assessment Procedures**

### **2.6.1. Assessment of the fulfilment of the plan regarding the implementation of the recommendations provided by the experts during the previous accreditation of the study field, as well as the assessment of the impact of the given recommendations on the study quality or the improvement of the study process within the study field and the relevant study programmes.**

Assessment of the impact of the recommendations made in the previous accreditation on the quality of studies and the improvement of processes in the study direction and the corresponding study programmes is provided in Annex 11, as well as taken into account in the development plan of the study direction (Annex 4.1).

Overall, regarding the study direction, several introduced changes, and their positive impact on the quality of studies and the improvement of the process can be noted.

In several study programmes, the workload of students has been reduced by re-planning the

volume and intensity of study courses in the initial semesters, for example, in the study programme 'Medicine,' where several base courses have increased credit points, thereby allocating additional time to learn the mandatory course material. Additional credit points have been assigned, for example, to courses 'Human Physiology' and 'Human Biochemistry.' Similar changes have been made in the study programmes 'Dentistry' and 'Pharmacy.'

Similarly, to reduce the load on students, the volume of content to be learned has been reviewed in a series of study courses, excluding secondary topics from the mandatory content. This has allowed a reduction in the volume of contact hours in these courses, while maintaining the opportunity for students with a deeper interest in these topics to learn them independently, using study materials prepared by the teaching staff in the E-study environment. These changes have reduced the workload on students, provided more time to devote to mastering more complex programme content, and enabled students to plan their learning more effectively according to individual interests for an in-depth study of particular topics.

Several actions have also been implemented for the more efficient use of resources in the study direction, for example, by consolidating thematically similar and partially overlapping study programmes. An example of this is the study programme 'Paediatrics,' which was closed (previously implemented parallelly to the study programme 'Medicine'), while preserving the opportunity to study Paediatrics content in-depth in the form of mandatory elective (B part) study courses, and also providing medical students with practical opportunities in paediatrics in the sixth year of study. Master's study programmes 'Rehabilitation' and 'Physiotherapy' were consolidated, and doctoral study programmes were combined to create a new unified doctoral study programme 'Health Care.' These changes have strengthened the mentioned programmes by ensuring both more efficient resource use and interdisciplinary study opportunities.

In the study direction, digital technologies are gaining increasing importance in programme content. Broader opportunities are opened both by the development of RSU's technological base, the development of academic staff's digital skills, and the overall development trends in the sector, which have drawn increasing attention to the development of students' digital skills. During the global pandemic caused by COVID-19, RSU demonstrated its ability to ensure a remote study process effectively. Thanks to the developed IT infrastructure and investments in enhancing the digital competence of the academic staff, it was possible to ensure both theoretical and practical training in a simulated online environment in the Health Care study direction programmes. Investments in enhancing the digital competence of the academic staff, ensured through regular and extensive training implemented by the IT department and the Centre for Educational Growth, have provided opportunities to improve both study management processes and study content and methods used in the study process.

Digital solutions are increasingly being integrated both into study management processes and into the implementation of studies, for example, by providing lectures in video format, as well as implementing some theoretical lessons in a remote format. The mentioned is not considered a direct recommendation from the previous accreditation, however, digitalization is associated with the modernization of the study process and forms, therefore it is reasonable to regard it as progressive changes, which are implemented in accordance with the modern higher education process.

For the improvement of study content management, several information technology systems and related processes have been developed. Improvements in the process of developing and updating course descriptions must be acknowledged. Since the previous accreditation, a new IT system has been established for the management and publication of course descriptions, which has made the course updating process more convenient and faster for the academic staff, as well as ensuring a

more efficient course description quality management process. This guarantees the constant refinement of course descriptions, including regular updates of the utilized bibliography list in collaboration with RSU Library specialists.

The experience from the previous accreditation confirmed that regular mapping of study outcomes provides a useful overview of the alignment of outcomes at both programme and course levels, allowing the identification and elimination of deficiencies in the study programme content and course succession. Taking this experience into account, RSU has developed a new IT system for managing study programmes, which includes a study outcomes mapping module. This module ensures efficient and transparent alignment of study outcomes at the programme and course levels, as well as monitoring the program's compliance with internal and external requirements (for example, fulfilling requirements included in the national higher education standards, achieving results anticipated in professional standards, ensuring study outcomes conform to the Latvian Qualifications Framework and the European Qualifications Framework, and other requirements).

In the study process, digital study materials are increasingly being used, and there is a transition from printed and often aging literature sources to electronic sources and systems, such as AMBOSS and UpToDate, which only feature the latest information, references, and content. These study databases are in demand and are popular among students in the Health Studies direction. It's also worth noting the digital learning materials developed by RSU's own academic staff, in which modern technologies are used for interactive content representation, for example, the development of interactive video lectures, as well as the development and integration of virtual patient scenarios into study courses.

The opportunities provided by technological advancements have also been utilized to foster a wider integration of international experience into the programmes of the study direction. The involvement of foreign academic staff in implementing the direction programmes has significantly increased. Some guest lectures take place in an online environment, and recordings of video lectures by foreign professors are also produced in the modernized RSU recording studios, which are available to a wide range of students in the direction via the E-study environment. Visits to RSU by foreign professors have also become more intensive, allowing us to assert that the study process has undergone internationalization, become more open to internationally recognized information, and modernized.

Persistent attention is also given to the development of students' research competencies and opportunities to engage in research work from the first years of study. As mentioned, the Doctoral study programme has been transformed, integrating three subprogrammes and changing the programme manager, and updating the opportunity for students at this level to publish together with a research group or individually. In several programmes of the direction, "Vertical Integration Project" (VIP) courses, which are based on research and involve undergraduate students, master students, residents, doctoral students, and researchers working together, have been included. These improvements develop the research process and publication possibilities within the framework of the study direction. As an example, the successful operation of the VIP project can be mentioned in implementing the "Medicine" programme at the Department of Biology and Microbiology.

Additional attention is devoted to working with students' feedback on study quality. As a result of prolonged efforts, student participation in improving study content, quality, and the study process has significantly improved - in the spring semester of 2023, the coverage of student surveying on course quality reached 70%. Such student involvement provides representative and valuable information to course supervisors and programme directors, who analyse it in-depth and inform students about planned and implemented changes and improvements, thereby ensuring effective

collaborative work on enhancing study quality.

In summarizing the results from implementing previous accreditation recommendations, it is notable that these have fostered enhancements in study quality and processes across various aspects:

1. Efficient use of direction resources has been affected, consolidating study programmes and reviewing programme and course content.
2. Student-centred reforms have been implemented, reviewing programme and course content to reduce the workload of students and ensure greater freedom for them in planning and implementing their learning.
3. Several initiatives have been implemented to enhance students' research skills and involve students in research work from the first years of study.
4. There has been success in increasing the integration of foreign knowledge, practices, and experience into the study content by involving a larger number of foreign guest lecturers in programme implementation.
5. There has been success in increasing student involvement in improving study quality, both by maintaining student participation in RSU collegial institutions and by encouraging more active student involvement in providing feedback.
6. By developing digital technologies and improving lecturers' digital skills, improvements have been made in both study management processes and the quality and accessibility of study materials, and the effective organization of students' digital skill development in study programs."

In summary, it can be concluded that evaluating the impact of implementing recommendations provided during the accreditation cannot be isolated from the comprehensive development of the study direction at RSU. External expert recommendations favor the university's development, and thus, the daily agenda of RSU also emphasizes growth and development. Faculty should be growth-oriented in their activities, and the department overseeing the faculty's work should engage in integrated communication with students, employer representatives, and graduates, as well as with faculty management. Concurrently, the university management should prioritize growth. This orientation not only facilitates dynamic development, essential in today's volatile environment, but also aligns with the work culture to which RSU adheres. Overall, the described section demonstrates the development foci implemented during the review period, which have been stimulated by both the expert recommendations from previous assessments and RSU's overarching trajectory towards growth.

Attached:

Annex 11. Fulfilment of the implementation plan for recommendations made by experts in the previous accreditation of the study direction.

Annex 4.1. Development plan of the study direction

**2.6.2. Implementation of the recommendations given by the experts during the evaluation of the changes to the study programmes in the respective study field or licensed study programmes over the reporting period or recommendations received during the procedure for the inclusion of the study programme on the accreditation form of the study field (if applicable).**

During the reporting period since the previous accreditation on 8 May 2017 for 6 years, the recommendations provided by the accreditation experts have been implemented. As the experts recommendations were focused on the improvements on study programme level, a detailed plan for implementation of the recommendations for each programme has been drawn up, see. Annex 11 for the report on the implementation of these recommendations.

As regards the changes in the study direction as a whole, the following should be mentioned as significant:

1. 10.11.2021. A new Doctoral study programme "Health Care" has been licensed, which combines itself as sub-programmes until then separately functioning doctoral study programmes: "Medicine", "Pharmacy", "Psychology", starting a more intensive development of the interdisciplinarity focus.
2. On 30.06.2021, a decision confirming the changes to the professional Bachelor`s study programme "nursing studies" submitted by RSU was taken by the study quality Committee in connection with the introduction of the general qualification of a nurse.
3. On 08.09.2021, an affirmative decision of the study quality Committee was taken regarding the transformation of the joint professional Master's study programme "Health Management" into an academic programme due to the need to develop the programme, including in the direction of digital health.
4. Four change procedures for 2020-2021 - in the second level professional study programme "Residency in medicine", introducing new specialty programmes, such as invasive Radiologist; Clinical microbiologist; Spine surgeon, etc.
5. 1.07.2020. Approval by the study quality Committee of the changes to the second level professional study programme "medicine" made with the aim to modernise doctors' education in Latvia and to adapt to the development trends of the sector also in international environment.
6. Since 2019, RSU has implemented the plan for the development and consolidation of study programmes and 6 study programmes have already been closed and are still to be closed.
7. Each study programme develops and implements its development plan (Annex 4.1), and during the reporting period there were not so large but significant changes in content in other programmes, such as Dentistry and Pharmacy.

The University is a dynamic environment in which the principles and innovations mentioned at the beginning of the self-assessment have been developed in the reporting period:

- integrity of research and practice;
- modernisation of the study process (digitisation, introduction of innovations, simulation-based learning approach, etc.) for effective learning outcomes;
- promoting academic integrity;
- cooperation and sharing of resources with local and foreign higher education institutions;

- Development of interdisciplinary sectoral cooperation with professional organisations;
- Compliance of the STP with the development of national economy and industries;
- promoting the export capacity of higher education and science;
- inter-university cooperation in the implementation of STP, combining resources to expand the study, research and innovation potential;
- monitoring the quality of studies and targeted development activities.

# Annexes

I - Information on the Higher Education Institution/ College		
Information on the implementation of the study field in the branches of the higher education institution/ college (if applicable)	2_Anx_Information_Implementatio_Study Direction in Liepaja Branch.pdf	2_pielik_Liepajas_Filiales_apraksts_Stv_Veselibas_aprupe_lv.pdf
List of the governing regulatory enactments and regulations of the higher education institution/ college	1_Anx_University_internal_regulations_16-10-2023.pdf	1_pielik_RSU_ieksejie_normative_akti_un_regulejumi_16-10-2023.pdf
The management structure of the higher education institution/ college	Annex 3_RSU organisational charts.pdf	3_pielik_RSU parvaldibas_strukturschema.pdf
II - Description of the Study Field - 2.1. Management of the Study Field		
Plan for the development of the study field (if applicable)	4.1_Annex_Development_Plan_Study_Direction_Health_Care_10-10-2023.pdf	4.1_pielik_Stv_Attistibas_plans_aktualizets_10-10-2023.pdf
The management structure of the study field	Annex 4.2_RSU management structure of study direction.pdf	4.2_St_virziena_parvaldibas_strukturschema_lv.pdf
A document certifying that the higher education institution or college will provide students with opportunities to continue their education in another study programme or another higher education institution/ college (agreement with another accredited higher education institution or college) if the implementation of the study programme is terminated.	24.2_pielik_Aplicinajumi_par_parnemsanu_eng.7z	24.2_Pielik_aplicinajumi_visam_programmam_lv.7z
A document certifying that the higher education institution or college guarantees compensation for losses to students if the study programme is not accredited or the study programme license is revoked due to actions (actions or omissions) of the higher education institution or college and the student does not wish to continue studies in another study programme.	24.3_Anx_Certification_of_Compensation_of_Losses_to_Students.pdf	24.3_Aplic_zaudejumu_kompens.pdf
Standard sample of study agreement	24.8_Anx_Study contract sample_Health Care study direction.pdf	24.8_pielik_Studiju_liguma_paraugs_Stv_Veselibas_aprupe.pdf
II - Description of the Study Field - 2.2. Efficiency of the Internal Quality Assurance System		
Analysis of the results of surveys of students, graduates and employers	21.1_Anx_StP_StC_survey_resultsStDirection_Health_Care_16-10-2023.pdf	21.1_pielik_Aptauju_rez_kopsav_Stv_Veselibas_Aprupe_lv_16-10-2023.pdf
II - Description of the Study Field - 2.3. Resources and Provision of the Study Field		
Basic information on the teaching staff involved in the implementation of the study field	6.1_Anx_Information on academic staff_Study direction.xlsx	6.1_pielik_Macibspeki_lv.xlsx
Biographies of the teaching staff members (Curriculum Vitae in Europass format)	6.2_Anx_CV_ENG_visas_programmas.7z	6.2_pielik_CV_LV_visas_programmas.7z
A statement signed by the rector, director, head of the study programme or field that the knowledge of the state language of the teaching staff involved in the implementation of the study programmes within the study field complies with the regulations on the state language knowledge and state language proficiency test for professional and official duties.	24.4_Anx_Certification_Regarding_Latvian_Language_of_the_Academic_Staff.pdf	24.4_Aplicinajums_par_valsts_valodas_prasmi_Stv_VA.pdf
A statement of the higher education institution/ college on the respective foreign language skills of the teaching staff involved in the implementation of the study programme at least at B2 level according to the European Language Proficiency Assessment levels (level distribution is available on the website www.europass.lv, if the study programme or part thereof is implemented)	24.5_Anx_Certification_Regarding_the_English_Language_Knowledge.pdf	24.5_Aplicinajums_par_macibspeku_anglu_valodu_Stv_VA.pdf
II - Description of the Study Field - 2.4. Scientific Research and Artistic Creation		
Summary of quantitative data on scientific and/ or applied research and / or artistic creation activities corresponding to the study field in the reporting period.	6.4.1_Anx_Summary_of_academic_staff_publications_16-10-2023.pdf	6.4.1_pielik_Kopsavilkums_macibsp_publicacijam_16-10-2023.pdf
List of the publications, patents, and artistic creations of the teaching staff over the reporting period.	6.4.2_Anx_Scientific_activity_acad_staff_Health_Care_StD_IF_16-10-2023.pdf	6.4.2_pielik_Stv_Ves_apr_Akad_pers_publik_IF_faktors_lv_16-10-2023.pdf
II - Description of the Study Field - 2.5. Cooperation and Internationalisation		
List of cooperation agreements, including the agreements for providing internship	9.2_Anx_List of cooperation agreements_StD Health Care.pdf	9.2_pielik_Sadarbibas_ligumi_Stv_Veselibas_aprupe.pdf
Statistical data on the teaching staff and the students from abroad	8.1_Anx_Statistical_data_intern_stud_and_lecturers_of_StDirection.pdf	8.1_Pielik_StVirziena_arvalstu_stud_un_macibspeku_statistika_16-10-2023_lv.pdf
Statistical data on the incoming and outgoing mobility of students (by specifying the study programmes)	8.2_Anx_Student_Mobility_16-10-2023.pdf	8.2_pielik_Studejoso_mobilitate_kopa_16-10-2023.pdf
Statistical data on the incoming and outgoing mobility of the teaching staff	6.3_6.3.1_Anx_Academic_staff_mobility_In_Out_16-10-2023.pdf	6.3_6.3.1_pielik_Ienakosa_Izejosa_Stv_VesApr_Docetaju_mobilitate_kvantitativie_dati_lv_16-10-2023.pdf
II - Description of the Study Field - 2.6. Implementation of the Recommendations Received During the Previous Assessment Procedures		
Report on the implementation of the recommendations received both in the previous accreditation and in the licensing and/ or change assessment procedures and/ or the procedures for the inclusion of the study programme on the accreditation form of the study field.	2.6.1_Anx_Impact_expert_recommendations.pdf	2.6.1_pielik_Ekspertu_sniegto_rekomendaciju_ietekme_no_raksturojuma.pdf
An application for the evaluation of the study field signed with a secure electronic signature	RSU_Iesniegums_studiju_virziena_Veselibas_aprupe_novertesanai_en.pdf	Iesniegums studiju virziena "Veselības aprūpe" novērtēšanai 16-10-2023_precizets uz papildinformaciju.edoc
III - Description of the Study Programme - 3.1. Indicators Describing the Study Programme		
Sample of the diploma and its supplement to be issued for completing the study programme		
For academic study programmes - Opinion of the Council of Higher Education in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions (if applicable)		
Compliance of the joint study programme with the provisions of the Law on Higher Education Institutions (table) (if applicable)		
Statistics on the students in the reporting period		
III - Description of the Study Programme - 3.2. The Content of Studies and Implementation Thereof		
Compliance with the study programme with the State Education Standard		
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard or the requirements for professional qualification (if applicable)		
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)		
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme		
The curriculum of the study programme (for each type and form of the implementation of the study programme)		
Descriptions of the study courses/ modules		
Description of the organisation of the internship of the students (if applicable)		
III - Description of the Study Programme - 3.4. Teaching Staff		
Confirmation that the academic staff of the doctoral study programme includes not less than five doctors, of which at least three are experts approved by the Latvian Council of Science in the branch or sub-branch of science in which the study programme intends to award a scientific degree (if applicable)		

Confirmation that the academic staff of the academic study programme complies with the requirements specified in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions (if applicable)		
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## Other annexes

Name of document	Document
26_pielik_Medicinas_Informacijas_Tehnologiju_Centrs.pdf	26_pielik_Medicinas_Informacijas_Tehnologiju_Centrs.pdf
26_Anx_Information_Medical_Education_Technology_Centre.pdf	26_Anx_Information_Medical_Education_Technology_Centre.pdf
5_pielik_Studejoso_pasparvaldes_darbiba_lv.pdf	5_pielik_Studejoso_pasparvaldes_darbiba_lv.pdf
5_Anx_Activities_of_Student_Union.pdf	5_Anx_Activities_of_Student_Union.pdf
13.1_pielik_RSU_integretas_marketinga_un_sabiedrisko_attiecibu_aktivitates.pdf	13.1_pielik_RSU_integretas_marketinga_un_sabiedrisko_attiecibu_aktivitates.pdf
13.1_Anx_RSU integrated marketing and public relations activities.pdf	13.1_Anx_RSU integrated marketing and public relations activities.pdf
13.2_pielik_RSU istenotie projekti_StV Veselibas aprupe.pdf	13.2_pielik_RSU istenotie projekti_StV Veselibas aprupe.pdf
13.2_Anx_Projects implemented by RSU_StD Health Care.pdf	13.2_Anx_Projects implemented by RSU_StD Health Care.pdf
20.2_pielik_Brivas_izveles_studiju_kursi_lv.pdf	20.2_pielik_Brivas_izveles_studiju_kursi_lv.pdf
20.2_Anx_Offer of free elective study courses at RSU.pdf	20.2_Anx_Offer of free elective study courses at RSU.pdf
21.3_pielik_absolventu_aptaujas_anketas_LV.pdf	21.3_pielik_absolventu_aptaujas_anketas_LV.pdf
21.3_Anx_RSU_Graduate_Survey_regarding_studies.pdf	21.3_Anx_RSU_Graduate_Survey_regarding_studies.pdf
23.1_pielik_ESG standarta istenosana.pdf	23.1_pielik_ESG standarta istenosana.pdf
23.1_Anx_Compliance with ESG standards.pdf	23.1_Anx_Compliance with ESG standards.pdf
23.3_pielik_Inform_Metod_bazes_novert_lv.pdf	23.3_pielik_Inform_Metod_bazes_novert_lv.pdf
23.3_Anx_Inform_methodol_provision_regarding IT infrastruc.pdf	23.3_Anx_Inform_methodol_provision_regarding IT infrastruc.pdf
25_pielik_senata izraksts_StV Veselibas aprupe.pdf	25_pielik_senata izraksts_StV Veselibas aprupe.pdf
25_Anx_Extract from Senate_StD Health Care.pdf	25_Anx_Extract from Senate_StD Health Care.pdf
1.1_pielik_StP uznemsanas noteikumi.pdf	1.1_pielik_StP uznemsanas noteikumi.pdf
1.1_Anx_Admission regulations.pdf	1.1_Anx_Admission regulations.pdf
2.3.3_nodalai_Tabula_Statistikas_dati_par_datubazu_lietosanu.pdf	2.3.3_nodalai_Tabula_Statistikas_dati_par_datubazu_lietosanu.pdf
Chapter_2.3.3_Database_Usage_Statistics.pdf	Chapter_2.3.3_Database_Usage_Statistics.pdf
6.3_Docetaju_CV_kopa_16-10-2023.7z	6.3_Docetaju_CV_kopa_16-10-2023.7z
19_pielik_Planojums_Rezidentura_LV_precizets	19_pielik_Planojums_Rezidentura_LV_precizets.pdf
RSU_Veselibas_aprupe_papildinfo_pec_17-11-2023	RSU_Veselibas_aprupe_papildinfo_pec_17-11-2023.zip
Saite uz One Drive mapi_papildinformacija_no_RSU_pec_vizites	saite uz drive, kur ir papildinformacija no RSU_pēc vizītes.docx
22_pielik_Noslegumu_darbu_temas_Uzturzinatne_ENG	22_pielik_Noslegumu_darbu_temas_Uzturzinatne_ENG.pdf
22_pielik_Noslegumu_darbu_temas_Uzturzinatne_LV	22_pielik_Noslegumu_darbu_temas_Uzturzinatne_LV.pdf
RSU Further information on the implementation of the Skills Development Project (LV/ENG)	RSU Papildus informācija par prasmju attīstības projekta ieviešanu.pdf
"Medicīnas inženierija un fizika" (42527) Annex 9. Description of the organisation of placement of the students (RTU's annex)	RTU_par_prakses_organizesanas_kartibas_rigas_tehniskaja_universitate_apstiprinasanu_jauna_redakcija.pdf
RSU_Akreditācijas_vizite_13112023_ENG.pdf	00_RSU_Akreditācijas_vizite_13112023_ENG.pdf
1_Anx_supplement_Regulations_on_Acad_Elections	1_Anx_supplement_Regulations_on_Acad_Elections.pdf
1_pielikuma_papildinajums_Nolikums_akad_velesanam	1_pielikuma_papildinajums_Nolikums_akad_velesanam.pdf
16_pielik_Kopa_par_virzientu_statistika_lv	16_pielik_Kopa_par_virzientu_statistika_lv.pdf
16-Anx_Summary_statistic_direction_programmes	16-Anx_Summary_statistic_direction_programmes.pdf
19.2_Anx_StP_Medicine_Study_Hours	19.2_Anx_StP_Medicine_Study_Hours.pdf
19_Anx_Plan for full-time studies_Nursing_Studies	19_Anx_Plan for full-time studies_Nursing_Studies.pdf
19_Anx_Study_Plan_2L_Pharmacy	19_Anx_Study_Plan_2L_Pharmacy.pdf
19_pielik_StP_planojums_Farmacija	19_pielik_StP_planojums_Farmacija.pdf
19_pielik_StP_planojums_PBSP_Maszinibas	19_pielik_StP_planojums_PBSP_Maszinibas.pdf
21.1_Anx_Summary_of_student_survey_on_direction_programmes	21.1_Anx_Summary_of_student_survey_on_direction_programmes.pdf
21.1_Anx_Supplement_Employer_Survey	21.1_Anx_Supplement_Employer_Survey.pdf
21.1_pielik_apkopojums_par_virzientu_lv	21.1_pielik_apkopojums_par_virzientu_lv.pdf
21.1_pielikums_papildinajums_darba_deveju_aptauja	21.1_pielikums_papildinajums_darba_deveju_aptauja.pdf

# Public Health (42726)

Study field	<i>Health Care</i>
ProcedureStudyProgram.Name	<i>Public Health</i>
Education classification code	<i>42726</i>
Type of the study programme	<i>Professional bachelor study programme</i>
Name of the study programme director	<i>Solvita</i>
Surname of the study programme director	<i>Kļaviņa-Makrecka</i>
E-mail of the study programme director	<i>solvita.klavina-makrecka@rsu.lv</i>
Title of the study programme director	<i>Mg.sc.sal.</i>
Phone of the study programme director	
Goal of the study programme	<i>The aim of the study programme is to prepare specialists for work in the fields of public health corresponding to the development trends of the Latvian and European public health sector, and whose level of theoretical knowledge and practical skills after graduation from the study programme allows them to start independent professional activity, as well as to continue their education in relevant Master's level study programmes.</i>
Tasks of the study programme	<p><i>1. Provide professional Bachelor's level studies in public health in accordance with the current legislation regulating the study process -Cabinet Regulations No 305 "Regulations on the National Standard for Professional Higher Education" and the Professional Standard for Public Health Specialist, as well as in accordance with the Guidelines on Public Health Education developed by the Association of Schools of Public Health in the European Region (ASPHER1).</i></p> <p><i>2. Provide students with opportunities to acquire knowledge of philosophy, ethics, psychology, law, economics and business aspects that are binding on public health science and practice within the framework of general study courses of the programme.</i></p> <p><i>3. Ensure the acquisition of theoretical knowledge of public health and promote understanding of the role of evidence-based decision-making in public health.</i></p> <p><i>4. Provide students with the basis for their professional activity, improve their analytical skills and ability in addressing a range of public health problems through the professional specialisation study courses and placements of the programme.</i></p> <p><i>5. Promote the competitiveness of graduates in the labour market of Latvia and the European Union.</i></p>

Results of the study programme	<p>1. Able to demonstrate an understanding of the theoretical approaches and methodologies of public health, as well as of the different dimensions of health and the multifactorial nature of disease at both individual and societal levels;</p> <p>2. Able to demonstrate knowledge of public health as a multidisciplinary field and the most characteristic basic and specialised knowledge;</p> <p>3. Able to use the acquired theoretical foundations and skills in their professional activity; able to plan and carry out the stages of research work;</p> <p>4. Able to assess the state of public health, identify and analytically describe risk factors, make decisions and address problems;</p> <p>5. Demonstrate the ability to critically select scientific literature, process and analyse data, draw conclusions and make proposals in the preparation and defence of the semester paper and the Bachelor's thesis;</p> <p>6. Able to solve problems related to public health both independently and in a team, to make and justify decisions in a reasoned manner, to evaluate their prospective impact on public health at different levels;</p> <p>7. Able to communicate and discuss public health matters with colleagues, representatives of other professions and different groups of society, in accordance with the professional ethical standards of a public health professional;</p> <p>8. Able to understand and analyse health from the physical, mental and social aspect of human functioning.</p>
Final examination upon the completion of the study programme	<p>Development and defence of the Bachelor's thesis on the chosen public health topic.</p> <p>National Examination in public health.</p>

## Study programme forms

### Full time studies - 4 years - latvian

Study type and form	Full time studies
Duration in full years	4
Duration in month	0
Language	latvian
Amount (CP)	160
Admission requirements (in English)	Secondary education
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	Professional Bachelor's Degree in Health Care
Qualification to be obtained (in english)	Public Health Specialist

### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

### 3.1. Indicators Describing the Study Programme

**3.1.1. Description and analysis of changes in the parameters of the study programme made since the issuance of the previous accreditation form of the study field or issuance of the study programme license, if the study programme is not included on the accreditation form of the study field, including changes planned within the evaluation procedure of the study field evaluation procedure.**

Table 1. Changes in parameters of the study programme (StP)

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period (until 2022)	Planned changes within the assessment procedure (after the accreditation)
1.	Study direction	-	-
2.	Title of StP	-	-
3.	Code according to the Latvian Education Classification	-	-
4.	StP director	Since 1 September 2021, the director of the study programme has been Solvita Kļaviņa-Makrecka	-
5.	Scientific degree of the StP director	<i>Mg. sc. sal.</i> In 2021, the director of the study programme graduated the RSU doctoral study programme "Medicine" obtaining the status of a candidate for a scientific degree. Doctoral thesis development is still ongoing	Obtaining a doctoral degree
6.	Aim of StP	Updated to - the aim of the study programme is to prepare specialists corresponding to Latvian and European public health sector development trends for work in public health areas, whose level of theoretical knowledge and practical skills after graduating from the study programme enable them to start their independent professional activity, as well as continue education in relevant Master level study programmes.	-

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period (until 2022)	Planned changes within the assessment procedure (after the accreditation)
7.	Tasks of StP	<p>Updated to - 1. To ensure professional Bachelor level studies in public health in accordance with applicable regulatory enactments governing the study process – CM Regulations No. 305 “Regulations on the National Standard of Professional Higher Education” and the professional standard for a Public Health Specialist, as well as in accordance with the guidelines on public health education developed by the Association of Schools of Public Health in the European Region (ASPHER1).</p> <p>2. Within general education study courses of the programme, to provide students with the possibility to obtain knowledge in aspects of philosophy, ethics, psychology, law, economics, business, which are relevant to public health science and practices.</p> <p>3. To ensure mastering of theoretical knowledge in public health and raise awareness of the role of evidence-based decision-making in public health.</p> <p>4. In professional specialisation study courses and study placement of the programme, to provide students with a basis for professional activities, to promote their analytical abilities and skills in solving various public health problems.</p> <p>5. To promote the competitiveness of graduates in the labour market of Latvia and the European Union.</p>	–

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period (until 2022)	Planned changes within the assessment procedure (after the accreditation)
8.	Learning outcomes to be achieved	<p>1. To be able to demonstrate an understanding of the theoretical settings and methodologies of public health areas, as well as of the different health dimensions and multi-factor nature of diseases, both at individual and societal level.</p> <p>2. To be able to demonstrate knowledge of public health as a multi-profile area and the most representative basic and specialised knowledge.</p> <p>3. To be able to use theoretical foundations and skills acquired in their professional activities; to be able to plan and carry out research work stages.</p> <p>4. To be able to assess the state of public health, identify risk factors and analytically describe them, make decisions and solve problems.</p> <p>5. When developing and defending a course paper and a Bachelor's thesis demonstrates the ability to critically select scientific literature, process and analyse data, draw conclusions and make proposals.</p> <p>6. To be able to solve public health problems, make and substantiate decisions, evaluate their potential impact on public health at different levels, both independently and in team work.</p> <p>7. To be able to communicate on topics of public health, discuss them with colleagues, representatives of other professions, different groups of society, observing the professional ethical norms for a public health specialist.</p> <p>8. To be able to understand and analyse health from the physical, mental and social aspect of human functioning</p>	-
9.	Final examination upon the completion of StP	-	-
10.	Type and form of studies	-	-
11.	Duration of implementation	-	-
12.	Language of implementation	-	-

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period (until 2022)	Planned changes within the assessment procedure (after the accreditation)
13.	Workload of StP (CP)	-	In accordance with amendments to Section 1(8) of the Law on Higher Education Institutions, which entered into force on 11 October 2022, the transition to the European Credit Transfer and Accumulation System will be implemented until 31 December 2024

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period (until 2022)	Planned changes within the assessment procedure (after the accreditation)
14.	Admission requirements	<p>StP admission requirements were changed in the reporting period. Compared to the previous requirements, no CE result in biology is requested. It has been replaced with the annual grade in biology or life sciences, while a CE result or an assessment of an international testing institution is accepted in a foreign language. At the same time, the admission criteria have been broken down by percentage defining the importance of each criterion for the overall score. This fosters the selection of motivated and medicine and life sciences-oriented applicants for the StP, whose preliminary knowledge of appropriate level is necessary for the successful commencement and continuation of studies.</p> <p>Current requirements for applicants: secondary education; CE certificate in Latvian, mathematics; CE certificate in a foreign language or international testing institution's examination document; annual grade in biology or life sciences.</p> <p>Applicants of the study programme "Public Health" are enrolled according to the competition results, which are made up of the CE assessment in mathematics, Latvian language, foreign language and the annual grade in biology or life sciences.</p> <p>100% of the overall assessment of the admission results are composed of:</p> <ul style="list-style-type: none"> <li>· 5% of the total assessment is the CE assessment in mathematics;</li> <li>· 30% of the total assessment is the CE assessment in Latvian language;</li> <li>· 25% of the total assessment is the CE assessment in a foreign language or an international testing institution's examination document;</li> <li>· 40% of the total assessment is the annual grade in biology or life sciences.</li> </ul> <p>In the event of equal score, the CE assessment in mathematics is considered in the competition.</p> <p>Additional points are added to the total competition result for honourable places (places from 1 to 3):</p> <ul style="list-style-type: none"> <li>· at (national) subject olympiads of the Republic of Latvia – 2 points;</li> <li>· at international subject olympiads – 4 points;</li> <li>· Latvian (national) scientific research works of pupils in the section of life sciences, medicine or health sciences – 1 point;</li> <li>· international scientific research works of pupils in the section of life sciences, medicine or health sciences – 2 points.</li> </ul> <p>Information on the programme and admission requirements for applicants:  <a href="https://www.rsu.lv/studiju-programma/sabiedribas-veselibas">https://www.rsu.lv/studiju-programma/sabiedribas-veselibas</a></p>	-



No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period (until 2022)	Planned changes within the assessment procedure (after the accreditation)
15.	Degree to be awarded	-	-
16.	Qualification to be awarded	-	-
17.	Place of implementation	-	-

**3.1.2. Analysis and assessment of the study programme compliance with the study field. Analysis of the interrelation between the code of the study programme, the degree, professional qualification/professional qualification requirements or the degree and professional qualification to be acquired, the aims, objectives, learning outcomes, and the admission requirements. Description of the duration and scope of the implementation of the study programme (including different options of the study programme implementation) and evaluation of its usefulness.**

The professional Bachelor's StP "Public Health" is included in the RSU health care study direction finalising the comprehensive approach of the direction to the mastering of health care sciences – starting from health care at individual level to the evaluation of health indicators of communities and the population and the possibility to affect it in the context of the public health area. Such a logical and comprehensive approach has been preserved in the planning of StP courses, starting from mastering the general education courses (for example, "Biology", "Physics", "Medical Biochemistry", "Basics of Law", "Ethics", "Basics of Philosophy", etc.) and an insight into basic disciplines of medicine ("Anatomy", "Normal Physiology", "Internal Diseases", "Psychology in Public Health", etc.) in the first years of studies in StP and then increasing the share and complexity of specific courses in the field (for example, "Public Health", "Epidemiology", "Prevention, Health Promotion and Education", etc.) at later stages of studies (including participation in placement).

The study course planning described above fully ensures the achievement of the 8 (eight) learning outcomes set by StP, starting from a general understanding of health, its influencing factors and the field of public health to practical solving of public health problems. For the connection of study courses with the defined StP achievable results, see Appendix 18.1.

StP is mastered after the general or vocational secondary education has been obtained. The length of studies in full-time studies is four years. StP provides the Professional Bachelor's Degree in Health Care and Public Health Specialist Qualification. Therefore, in accordance with CM Regulations No. 322 of 13.06.2017 "Regulations on the Classification of the Latvian Education" (available in Latvian only) and StP code 42726, StP corresponds to the second level professional higher education (fifth level professional qualification and professional Bachelor's degree). The professional orientation and qualification to be awarded in the StP are supported by the StP aim,

tasks and learning outcomes, as well as the considerable amount of placement in the total CPs of the StP (29 / 43.5 of 160 / 240 CP / ECTS).

To achieve the aims of the StP, five StP tasks have been defined, which include both the acquisition of specialised knowledge and skills necessary for the qualification to be acquired in line with development trends in the European and global public health sectors and the mastering of general education study courses related to public health sciences and placement (e.g. philosophy, ethics, basics of law, etc.).

When performing the tasks defined for the StP, the programme graduate acquires certain knowledge, skills and competences. First, understanding of public health theoretical settings and public health as a multi-profile area. Second, the skills to use the knowledge acquired in their professional activities (including assessing the state of public health, identifying risk factors), carrying out research, making evidence-based decisions, dealing with problem situations, etc.

The content of studies, degree to be awarded and professional qualification conform to the profession standard of public health specialist registered at the National Centre for Education [https://registri.visc.gov.lv/profizglitiba/dokumenti/standarti/20170614\\_Profesiju\\_standarti\\_5.pdf](https://registri.visc.gov.lv/profizglitiba/dokumenti/standarti/20170614_Profesiju_standarti_5.pdf) (available in Latvian only).

To promote the selection of motivated and medicine and life sciences-oriented applicants, whose preliminary knowledge of appropriate level is necessary for the successful commencement and continuation of studies StP, the admission criteria have been broken down by percentage defining the importance of each criterion for the overall score. Thus, the admission process assesses the knowledge previously acquired by applicants in the following disciplines, which contribute to achieving further learning outcomes:

- 1) in biology or life sciences – knowledge of the appropriate level in these disciplines is necessary for achieving the learning outcomes such as understanding of different health dimensions, multi-factor nature of diseases both at individual and societal level, etc.;
- 2) the Latvian language and foreign language skills are necessary for achieving the learning outcomes of such ability to select scientific literature critically, process and analyse the data, draw conclusions and make proposals; ability to communicate on the topics of public health both with colleagues, representatives of other professions, different groups in the society, at the same time complying with the professional ethical norms of a public health specialist; writing a course paper and a Bachelor's thesis, etc.;
- 3) knowledge of mathematics is necessary for achieving the learning outcomes such as the ability to assess the state of public health, identify risk factors and describe them analytically; ability to make and substantiate decisions, assess their potential impact on public health at different levels, etc.

Enclosed:

Annex 24.1. Model diploma and supplement thereto.

Annex 24.8. Sample study contract.

### **3.1.3. Economic and/ or social substantiation of the study programme, analysis of graduates' employment.**

According to the profession standard, the task of a public health professional is to assess public health from a broad perspective by both identifying physical and mental health risk factors and building a health-promoting environment through appropriate evidence-based interventions. Thus, the competences and involvement of a public health professional are necessary for the implementation of the action lines set out in the “Public Health Guidelines 2021-2027”.

At the same time, the directions of activities of a public health professional are also in line with the EU strategic framework on health and safety at work 2021-2027 “Occupational safety and health in a changing world of work”,<sup>[1]</sup>, , emphasising a healthy workforce as the foundation of a strong and resilient economy and society. Promoting healthy lifestyle choices at workplace, on the other hand, can significantly reduce the incidence of absenteeism, acute and chronic illnesses (such as cancer, obesity, cardiovascular diseases and diabetes), reduce burnout and improve mental health. The document also highlights the timely identification and prevention of emerging health risks, data analysis and information of employees, which are the tasks of a public health professional. The requirements of the abovementioned document are also incorporated in the policy planning documents of the labour protection field of Latvia. This highlights the important role of public health professionals in achieving the objectives defined in public health policy planning documents at both national and international level.

In accordance with the procedures laid down by the RSU, student questionnaires are regularly organised for each study course at the end of the course, as well as at the end of the studies. When analysing the study programme evaluation questionnaires of students of the Professional Bachelor's StP “Public Health”, it can be concluded that a convincing majority (63%) of respondents are positive about their choice of study programme and almost all (97%) are satisfied with the achieved learning outcomes. All respondents have indicated that they are generally satisfied or fully satisfied with their choice of university.

StP courses are also highly appreciated with their average assessment of 3.59 points out of 4, which is a generally high evaluation and shows the relevance of the courses included in StP and the quality of their content.

With the support of the RSU Alumni Association and RSU Study Department and the Centre for Educational Growth, evaluations of 21 respondents were identified, who graduated from the StP in 2011 and later. In total, 17 of the abovementioned graduates of the professional Bachelor's study programme “Public Health” have graduated from the study programme in the last 6 years.

When analysing the questionnaires of graduates of the professional Bachelor's study programme “Public Health”, it can be concluded that the profession of a public health professional is chosen by women (95% of respondents) convincingly more often from year to year than by men, which is a common feature of health care and socially oriented study programmes. Similarly, the majority of respondents (57%) started studies in the study programme immediately after graduation from a secondary school, thus demonstrating the ability of the programme to positively position itself among other study programmes and attracting interest of applicants.

After graduation, graduates of the Public Health study programme most often work in Latvia – Riga (86% of respondents), most often as employees (95%), which reflects the trend that a large proportion of public health professionals start working in state or local government institutions related to the field of public health (Ministry of Health, Ministry of Welfare, Centre for Disease Prevention and Control, Health Inspectorate, State Labour Inspectorate, local governments, etc.) and non-governmental organisations – are less likely to start working as self-employed persons or develop private businesses. For almost all graduates, who responded, work is related (47% of

respondents) or partly related (42% of respondents) to the public health sector.

Almost all of the surveyed graduates (95%) generally assess the graduated study programme positively. It is noted that graduates are comparatively more likely to positively evaluate theoretical knowledge acquired during studies (95% of respondents), while the practical skills acquired during studies are positively evaluated by a slightly smaller number of respondents – 76%. All respondents have recognised that the knowledge and skills acquired in the study programme are useful in their profession. This indicates the need to develop the practical section of the study programme for mastering of the practical skills and knowledge to be applied in the profession of public health professional. Similarly, the overwhelming majority of respondents (90%) indicated that the acquired education has contributed to finding a job.

71% of respondents believe that they would recommend this study programme to other persons, who are interested to study.

[1] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. EU strategic framework on health and safety at work 2021-2027. Occupational safety and health in a changing world of work. <https://eur-lex.europa.eu/legal-content/LV/TXT/?uri=CELEX:52021DC0323>

#### **3.1.4. Statistical data on the students of the respective study programme, the dynamics of the number of the students, and the factors affecting the changes to the number of the students. The analysis shall be broken down into different study forms, types, and languages.**

An annual stable increase in the number of students enrolled to StP has been observed since academic year 2016/2017. It almost doubles in academic year 2020/2021: 22 students were enrolled in the year 2016/2017, 40 students – in the year 2020/2021. The increase in the number of students enrolled to StP is explained by the increase of awareness of the public health speciality, as well as the increased interest of potential students in health matters in the context of the Covid-19 pandemic, which resulted in historically the highest number of enrolled students in academic year 2020/2021.

The number of graduates in the mentioned reporting period was variable, varying from 12 (in academic year 2019/2020) to 22 (in academic year 2017/2018) and in all the cases is below that the number of students initially enrolled to the respective course. Every year, the highest number of student drop-outs is observed in the first year of studies. In the reporting period, this indicator for 1<sup>st</sup> year students varied from 6 to 9 every year. The second largest drop-out is observed in the 2<sup>nd</sup> year of studies – 1 – 3 students per year during the reporting period. In the third and fourth year of studies such situations are rare. This is due both to the new area of student studies and the search for their own interests and to the different level of intensity of workload and information processing intensity that have been experienced in the past. In order to reduce student drop-outs, students are informed about changes in the dynamics of study workload by semesters already at the beginning of semester 1. As well as individual discussions are conducted with each student who has submitted an application for withdrawal to ascertain the reasons for such selection, as well as to discuss possibilities for changing or postponing the decision taken.

This is confirmed by an analysis of the reasons for student drop-outs during the reporting period, in

which the two equally common reasons for exmatriculation are “failure” (36%, n = 18) and “withdrawal” (36%, n = 18). Then follow “not resuming studies after academic leave” (12%, n = 6) and “not attending classes” (10%, n = 5).

During the studies, StP students also take advantage of the mobility opportunities offered by the university under the Erasmus programme. Currently, three cooperation agreements have been concluded within the framework of the Professional Bachelor’s study programme “Public Health” to promote student mobility – with Klaipeda University (Lithuania), University of Tartu (Estonia) and the University of Eastern Finland (Finland). During the reporting period four students participated in outgoing mobility activities of students, two of whom went to the University of Eastern Finland and one to the other two universities, spending an average of 4-5 months in exchange studies. The knowledge learned during mobility is recognised and credit points necessary for the mastering of the programme are awarded.

Enclosed:

Annex 16. Statistical data on students.

**3.1.5. Substantiation of the development of the joint study programme and description and evaluation of the choice of partner universities, including information on the development and implementation of the joint study programme (if applicable).**

Not applicable.

## **3.2. The Content of Studies and Implementation Thereof**

**3.2.1. Analysis of the content of the study programme. Assessment of the interrelation between the information included in the study courses/ modules, the intended learning outcomes, the set aims and other indicators with the aims of the study course/ module and the aims and intended outcomes of the study programme. Assessment of the relevance of the content of the study courses/ modules and compliance with the needs of the relevant industry, labour market and with the trends in science on how and whether the content of the study courses/ modules is updated in line with the development trends of the relevant industry, labour market, and science.**

The structure of StP curriculum broken down by thematic blocks of courses is summarised in Table 2.

*Table 2. Structure of the education program*

1. Study Courses	1.1. General education study courses	incl. humanities and social sciences courses, including study courses that develop basic social, communicative and organisational skills
		incl. study courses, which include a module for developing the professional competence of entrepreneurship
	1.2. Industry-specific theoretical basic courses and information technology study courses	
	1.3. Field-specific professional specialization study courses	
	1.4. Elective courses (Part B – 22 CP / 33 ECTS, Part C – 2 CP / 3 ECTS)	
2. Placement		
3. Research papers		
4. Study courses the content of which includes the requirements of the Environmental Protection Law and the Civil Protection and Disaster Management Law		
5. State examination, which includes preparation and defence of the Bachelor's thesis		

To implement the aims to be achieved by StP, the thematic planning of the StP implementation provides that the first semesters include the fundamental theoretical study courses creating understanding of human body, physical and psychic aspects of its functioning (for example, "Biology", "Anatomy", "Normal Physiology", etc.), health, the multitude of factors affecting it and possibilities to determine them (for example, "Basics of Public Health", "Environmental Health", "Mathematical Statistics", "Informatics", etc.). To ascertain the ability of students to find their way in basic theoretical study courses, as well as mastering of the industry specialisation basis, at the end of the 2<sup>nd</sup> year of studies, students draft a course paper, preparing a literature review on a topic of public health, thereby demonstrating not only the acquired understanding of the field of public health, but also their skills in formulating the research matter, aim and tasks and critical analysis and systemisation of sources of information.

The proportion of industry-specific study courses (e.g. "Prevention, Health Promotion and Education", "Health Communication in Public Health", "Public Health Policy Development", etc.) is increasing in the range of study courses to be studied in the coming semesters, as well as study courses providing skills for independent research work, which will be further needed in the development of the Bachelor's thesis (e.g. "Basics of Research Methodology", "Mathematical Statistics" (in-depth course), "Research Data Processing", etc.).

StP has purposefully designed a supply of restricted elective study courses (Part B courses) to promote the acquisition of knowledge and skills necessary for the profession. At the same time, the planning of restricted elective courses by semester has been coordinated with the study courses of the compulsory part to perfect and substantively supplement, deepen knowledge in the specific fields. For example, in the 3<sup>rd</sup> year of studies, part A provides study courses showing the aetiology of diseases, their social nature and the possibilities for prevention. In addition, part B courses such as "Oral Health", "Oncology", "Introduction to Psychosomatics", etc. In the fourth year of studies, when the Bachelor's thesis is being developed, part B offers a course on the processing of research

data to provide additional support for the analysis of the Bachelor's thesis data, etc. (see Table 3).

As of academic year 2023/2024, a free elective course (Part C) of 2 CP/3 ECTS is also included in the StP, which is offered in semester 4.

*Table 3.* Thematic planning of the study programme by years of studies linked to restricted elective study courses

<b>Study year</b>	<b>Study courses taught and their courses (courses of Part A)</b>	<b>Restricted elective study courses (courses of part B)</b>
I	<ul style="list-style-type: none"> <li>· Theoretical knowledge in the fundamental and medical basic disciplines: Anatomy, Biology, Normal Physiology, Medical Biochemistry, Physics, etc.;</li> <li>· specialised study courses taught over the next study years: Public Health;</li> <li>· social and humanities study courses: Psychology in Public Health, Ethics, Basics of Philosophy, Medical Terminology in English, Basics of Latin, Basics of Law, Introduction to Sociology;</li> <li>· in order to get acquainted with environmental indicators in assessment of ecological balance and contamination, a placement in biology and ecology is arranged</li> </ul>	<ul style="list-style-type: none"> <li>· Healthy Food Preparation;</li> <li>· Informatics;</li> <li>· Nordic Walking;</li> <li>· Pilates;</li> <li>· Businesslike Etiquette</li> </ul>
II	<ul style="list-style-type: none"> <li>· Study courses exploring changes in the human body, their causes, detection, recovery, and prevention: Pathology Course for Public Health Professionals, Normal Physiology, Microbiology, Internal Diseases;</li> <li>· specialised study courses: Mathematical Statistics I, Environmental Health, Public Health, Epidemiology, Introduction to Sociology;</li> <li>· basics of scientific research: Basics of Research Methodology and Course Paper in Public Health;</li> <li>· placements in environmental health is arranged allowing to get acquainted with the most important risks in the human environment from the point of view of health care monitoring (from the point of view of health), system and methods of assessment, as well as the acceptable level of pollution</li> </ul>	<ul style="list-style-type: none"> <li>· Sexual Health and Education;</li> <li>· Medicinal Plants, their Use;</li> <li>· Nordic Walking;</li> <li>· Abdominal Pathologies;</li> <li>· Basic Pharmacology;</li> <li>· Pedagogy for Public Health;</li> <li>· Pilates</li> <li>· Free elective study courses</li> </ul>

III	<ul style="list-style-type: none"> <li>· Study courses exploring aetiology of diseases, their social nature and prevention possibilities: Social Medicine, Social Pediatrics, Introduction to Psychosomatics, Women Health, Nutritional Education;</li> <li>· specialised study courses: Environmental Health II, Infectious Diseases, Food Safety Systems, Prevention, Health Promotion and Education, Health Communication in Public Health;</li> <li>· social and humanities study courses: Economic and Basics of Business, Social Medicine, Social Paediatrics;</li> <li>· study placements: Epidemiological Monitoring, Safety of the Human Living Environment, Food Chain Monitoring, Health Promotion</li> </ul>	<ul style="list-style-type: none"> <li>· Dermatoepidemiology;</li> <li>· Oral Health;</li> <li>· Oncology;</li> <li>· Introduction to Psychosomatics;</li> <li>· Records Management</li> </ul>
IV	<ul style="list-style-type: none"> <li>· Compulsory study courses: Quality Management, Organisation of Health Care, Occupational Medicine, Occupational Health and Civil Protection, Public Health Policy Development, Public Mental Health Care and Social Work in Psychiatry, Organisation of Health Care;</li> <li>· social and humanities study courses: Project Management, Quality Management;</li> <li>· Placement in Occupational Health – students assess the employees’ health risks in different manufacturing enterprises and draw recommendations to diminish them.</li> <li>· writing and defending bachelor’s thesis on the selected public health topic.</li> <li>· state examination in public health</li> </ul>	<ul style="list-style-type: none"> <li>· Health Promotion at School;</li> <li>· Gerontology;</li> <li>· Physical Medicine and Rehabilitation;</li> <li>· Nordic Walking;</li> <li>· Training Methods in Health Education;</li> <li>· Communication Psychology and Communication Skills;</li> <li>· Management;</li> <li>· Environmental and Occupational Psychology;</li> <li>· Research Data Processing;</li> <li>· Social Work</li> </ul>

To promote mastering of students’ practical skills and knowledge, the 1<sup>st</sup>, 3<sup>rd</sup> and 4<sup>th</sup> year of studies include study placements (for example, “Placement in Biology and Ecology” – in the 1<sup>st</sup> year of studies, “Environmental Health Placement” – in the 2<sup>nd</sup> year of studies, “Placement in Food Chain Monitoring”, “Placement in Safety of the Human Living Environment”, “Placement in Epidemiological Monitoring”, “Placement in Health Promotion” – in the 3<sup>rd</sup> year of studies and “Placement in Occupational Health” – in the 4<sup>th</sup> year of studies). Study placements provide with the required professional skills balancing the theoretical knowledge with practical skills. Study placements are coordinated with the relevant study courses in the curriculum (see Table 4).

*Table 4. Coordination of theoretical study courses and study placements*

Study year	Title of the Theoretical Study Course	Title of study placement and volume of credit points	Location of study placement
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I	Biology	Placement in Biology and Ecology (2 CP/ 3 ECTS)	Placement base of Faculty of Biology in University of Latvia (Slītere National Park, Kolka)
II	Environmental Health I	Environmental Health Placement (2 CP/ 3 ECTS)	Department of Occupational and Environmental Medicine of RSU
III	Environmental Health II. Epidemiology of Infectious Diseases. Infectious Diseases	Placement in Epidemiological Monitoring (4 CP/ 6 ECTS). Placement in Safety of the Human Living Environment (3 CP/ 4.5 ECTS)	Centre for Disease Prevention and Control.  Health Inspection
	Nutritional Science Food Safety Systems	Placement in Food Chain Monitoring (3 CP/ 4.5 ECTS)	Food and Veterinary Service
	Prevention, Health Promotion and Education	Placement in Health Promotion (4 CP/ 6 ECTS)	Ministry of Health of the Republic of Latvia Local governments and their structural units Non-governmental organisations
IV	Occupational Medicine, Occupational Health and Civil Protection	Placement in Occupational Health (4 CP/ 6 ECTS)	Department of Occupational and Environmental Medicine of RSU RSU Agency Institute of Occupational Safety and Environmental Health

The content and structure of the StP is created and regularly reviewed in cooperation with employers, students, academic professionals through the work of the StP Quality Council to ensure its compliance with industry, labour market needs and scientific trends.

For example, on 26.01.2022, the StP Quality Council decided:

1) to supplement the content and volume of the course “Occupational Medicine, Occupational Health and Civil Protection” due to the forthcoming changes to Regulations of the Cabinet of Ministers No. 723 of 08.08.2008 “Regulations Regarding the Requirements for Competent Authorities and Competent Specialists in Labour Protection Issues and the Procedures for Assessing Competence”, which provides for wider involvement of public health professionals. Thus, the content of the course was supplemented with the necessary topics to ensure the successful competitiveness of StP graduates in this field of work;

2) following recommendations from lecturers and students to change, for example, the course “Basics of Sociology”, “Environmental Health”, the implementation time by semester to improve the sequence of content learning and easier perception in conjunction with students’ preliminary knowledge, etc.

Representatives of employers (for example, from the Centre for Disease Prevention and Control, the Ministry of Health, the Health Inspectorate, etc.) are also invited to the StP’s final examination (state examination and defence of a Bachelor’s thesis) to commissions, thus providing a direct feedback on students’ knowledge and preparedness for the work environment.

Enclosed:

Annex 17.1. Compliance of the study programme with the national educational standard.

Annex 18.1. Mapping of the study courses for the achievement of learning outcomes of the study programme.

Annex 18.2. Compliance of the qualification to be acquired upon completion of the study programme with the professional standard.

Annex 19. Planning of the study programme (for each type and form of the implementation of the study programme).

Annex 20. Description of study courses.

**3.2.2. In the case of master's and doctoral study programmes, specify and provide the justification as to whether the degrees are awarded in view of the developments and findings in the field of science or artistic creation. In the case of a doctoral study programme, provide a description of the main research roadmaps and the impact of the study programme on research and other education levels (if applicable).**

Not applicable.

**3.2.3. Assessment of the study programme including the study course/ module implementation methods by indicating what the methods are, and how they contribute to the achievement of the learning outcomes of the study courses and the aims of the study programme. In the case of a joint study programme, or in case the study programme is implemented in a foreign language or in the form of distance learning, describe in detail the methods used to deliver such a study programme. Provide an explanation of how the student-centred principles are taken into account in the implementation of the study process.**

Lecturers of the study programme use several study methods in their work with students, implementing the principles of student-centred education and respecting the different learning methods and styles of students, different previous experience and knowledge, ensuring regular feedback, as well as promoting cooperation between students and teachers.

**Interactive lectures (including discussions)** aimed at involving students in active learning and participation in identification of the topical public health issues, analysing them and offering a solution, discuss the future perspective of public health sciences, the research opportunities in public health area, and to understand the role of evidence-based decisions.

**Classes, seminars (including case analyses)** – more specific subjects are discussed in seminars and classes, including training practical skills. During the public health-specific study courses, students learn to plan a research project, to gather and present health-defining information, to calculate health indicators, to carry out a practical analysis of public health challenges, etc. Students are taught to look for complex solutions for particular public health problems.

**Work in small groups** develops students' skills of communication, cooperation, establishing dialogue, defining and expressing an opinion, as well as the ability to compromise.

**Student's independent work** as a study form is about 60% of the total study volume. Independent learning of students, as well as undertaking of responsibility and control over own study process is promoted through students' independent work.

Form, organisation and test of student's independent work forms are determined and monitored by study course supervisor and lecturers involved in the study course implementation. The

independent work may be, for example, preparing a research project, developing instruments for data required for research, solving epidemiological tasks, writing a paper, examination of a certain public health issue, analysis and assessment of a situation, analysis of a scientific article, preparing a summary of factual material, development of a preventive programme, etc. The material for improvement of students' independent work are placed in the e-learning environment. Students demonstrate their independent work skills during placement and writing and defending their Bachelor's theses. Student's independent work is assessed and the score is included in the total study course assessment received at the end of the study course.

**Studies on the e-platform** – in the e-platform (Moodle), students both receive lecture materials and texts used in the particular study course, thus ensuring the possibility to do study work at a convenient time, but also create and submit their independent papers devoted to analysis of specific public health issues.

Assessment of students' achievements is based on the following general principles:

- **transparency of knowledge and skills assessment**, e., at the beginning of the study course, information is made available on the set of requirements to be fulfilled in order to receive a positive assessment;
- **the principle of mandatory assessment** – student must obtain a positive assessment on learning the content of the course, i.e., course test work and the final examination (a test or exam) must be assessed as at least “almost satisfactory” (4 points) or “passed”;
- **diversity of test forms** – several types of tests are used in assessment of learning outcomes of courses of the study programme: written tests, tasks, situation analysis, etc., oral tests of knowledge and demonstration of skills;
- **conformity** – in examinations, students shall have the opportunity to demonstrate their knowledge, their analytical, creative, and research abilities, as well as course-specific skills.

At the end of all study courses, student must receive an assessment confirming the level of achievement of learning outcomes. Study course supervisors develop an examination assessment algorithm approved in the session of the relevant academic unit. Same assessment algorithm is applied to all students. Assessment methods must correspond to study course content and be able to measure the learning outcomes. The form M-3“ Study Course Description” contains the planned study course outcomes, as well as assessment criteria and test types.

Testing of students' knowledge and skills may be organised in different ways, depending on the study course specificity. This may include test work, written papers, colloquia, class tests, theoretical tests, exams, defending scientific projects, defending placements, national degree examinations, defending Bachelor's theses.

Different **test forms** may be used in exams and theoretical tests: written or oral examination; computerised-organised examination; combined examination. RSU Study Regulations I contain a detailed description of organisation of exams and theoretical tests, passing requirements, and possibility of appeal.[\[1\]](#)

**Assessment of course paper** is performed by a commission consisting of at least three members – lecturers from the RSU Department of Public Health and Epidemiology. 10-point system is used to assess the course paper taking into consideration both its structure, content and methodological conformity with the requirements of a research paper, as well as student's presentation skills.

**Bachelor's theses** and **national degree examinations** are assessed by the commission approved by a rector's decree, where at least 50% of commission members are representatives of employers.

**During the placement**, student fills in a placement logbook. Placement supervisor assesses both practical skills and student's attitude towards the duties assigned during placement. The final assessment of placement (passed or failed) is given by the responsible lecturer at the faculty after defending the placement. Student may submit an appeal if he/she disagrees with the given assessment[2] and/or file a complaint[3] regarding assessment methods.

All assessment criteria are in conformity with the Law On Institutions of Higher Education, Cabinet Rules No. 240 of 13 May 2014 Regulations on State Academic Education Standard, and Cabinet Regulations No. 512 of 26 August 2014 Regulations on the Second Level Professional Higher Education State Standard.

[1] Rīga Stradiņš University Academic Regulations I. <http://www.rsu.lv/par-rsu/normativie-akti-un-dokumenti/rigas-stradina-universitates-studiju-reglaments-i>; available in English [here](#).

[2] Rīga Stradiņš University Academic Regulations I, Paragraph 10. Submission and hearing of appeal.

[3] Process Description No. 31 Receipt and handling of complaints and suggestions, activities aimed at improving management system.

**3.2.4. If the study programme envisages an internship, describe the internship opportunities offered to students, provision and work organization, including whether the higher education institution/ college helps students to find an internship place. If the study programme is implemented in a foreign language, provide information on how internship opportunities are provided in a foreign language, including for foreign students. To provide analysis and evaluation of the connection of the tasks set for students during the internship included in the study programme with the learning outcomes of the study programme (if applicable).**

Study placement is a compulsory and integral part of the study programme. Aim of the placement: to give students an opportunity to strengthen theoretical knowledge, to acquire competence appropriate to the study programme, and to acquire practical skills necessary for specialists in the respective field. To ensure a balance between theoretical knowledge and practical skills, study placements are organised within the framework of the StP in each year of studies, which are coordinated with the corresponding study courses in the study plan (see Table 4). During placement, students have the opportunity to test and use the mastered theoretical knowledge and skills in real work, learn to evaluate the state of public health (for example, placement in epidemiological monitoring of infectious and non-infectious diseases), identify risk factors (for example, placement in safety of the human living environment, placement in environmental health), learn to make decisions independently in the implementation of interventions (for example, placement in health promotion) and subsequently evaluate their professional performance receiving feedback from placement supervisors and defence of placement.

Placement and search for placement places are organised and supervised by RSU. Part of placements take place in RSU structural units such as placement in occupational health and placement in environmental health – at the RSU Department of Occupational and Environmental Medicine and the RSU Institute for Occupational Safety and Environmental Health; or at scientific research bases of cooperation partners, for example, placement in biology and ecology takes place

at the Faculty of Biology of the University of Latvia (Slītere National Park, Kolka). Most placements are organised in cooperation with sector-specific state administration institutions, for example, in the Health Inspectorate – placement in safety of the human living environment, Centre for Disease Prevention and Control – placement in epidemiological monitoring, Food and Veterinary Service – placement in food chain monitoring. Placement in health promotion is organised in cooperation with state and local government institutions, which operate in the field of public health and health promotion (for example, various local governments of Latvia and their structural units, local government agencies, Centre for Disease Prevention and Control, Ministry of Health, etc.), as well as non-governmental organisations and enterprises registered in the Republic of Latvia, the field of operations of which is public health, health care, for example, the Latvian Red Cross, Society “Papardes zieds”, SIA DiviGani, etc. Each placement is organised as a continuous module of 5-15 consecutive working days.

To promote more versatile placement experience for students and the interest of prospective professionals in work in regions of Latvia, identifying the practical possibilities of students and cooperating with placement places, each year an opportunity is found to have placement in branch offices of institutions outside Riga (for example, in branches of the Health Inspectorate, Centre for Disease Prevention and Control, Food and Veterinary Service or in various local governments of Latvia for placement in health promotion). Thus, some student practices have placement in regions.

Enclosed:

Annex 9. Description of the organisation of placement of the students.

### **3.2.5. Evaluation and description of the promotion opportunities and the promotion process provided to the students of the doctoral study programme (if applicable).**

Not applicable.

### **3.2.6. Analysis and assessment of the topics of the final theses of the students, their relevance in the respective field, including the labour market, and the marks of the final theses.**

A Bachelor's thesis is the mandatory final examination of the professional Bachelor's study programme of the Faculty of Public Health and Social Welfare of Rīga Stradiņš University, which clearly shows the theoretical knowledge of the candidate for a Bachelor's degree in public health, the student's ability to use the mastered learning material, to work independently with scientific literature and research work methods, the skill to analyse data and draw conclusions. A Bachelor's thesis is a student's independent research of a problem in public health and is a mandatory part of the study programme.

The procedure of writing and defence of a Bachelor's thesis is laid down in the [“Regulations on Writing and Defence of Qualification Paper, Student's Research Paper, Bachelor's Thesis and Master's Thesis”](#), [“Procedure for Submission and Storage of Electronic Versions of Student](#)

Qualification Papers, Bachelor's Theses and Master's Theses or other Final Papers in RSU Open Access Institutional E-Resource Repository" of Rīga Stradiņš University, as well as Rīga Stradiņš University Academic Regulations I.

The thematic areas of the Bachelor's thesis available and the scientific supervisors thereof are offered to students of the professional Bachelor's study programme during semester 7 of studies. Thematic areas of Bachelor's theses are offered by several RSU structural units (for example, the Department of Public Health and Epidemiology, the Institute of Occupational Safety and Environmental Health). Thematic areas of the Bachelor's thesis to be offered to students are examined, as well as supplemented with recommendations regarding the latest developments in the field of public health at the Study Programme Quality Council, which includes representatives of employers, thereby ensuring the linking of research with the labour market and latest developments in the field of public health. The list of common thematic areas is drawn up by the director of the study programme and the list is given to students. A student shall choose the subject of the Bachelor's thesis and the supervisor of the Bachelor's thesis from the offered list in accordance with his or her interests. The final wording of the subject of the Bachelor's thesis is updated by the student in consultation with the scientific supervisor of the thesis.

Students have the right to offer their own research topic and choose a thesis supervisor who agrees to supervise his or her Bachelor's thesis. The supervisor of a Bachelor's thesis needs a scientific Master's or doctoral degree. The topic of the Bachelor's thesis should correspond to the public health speciality and its study programme.

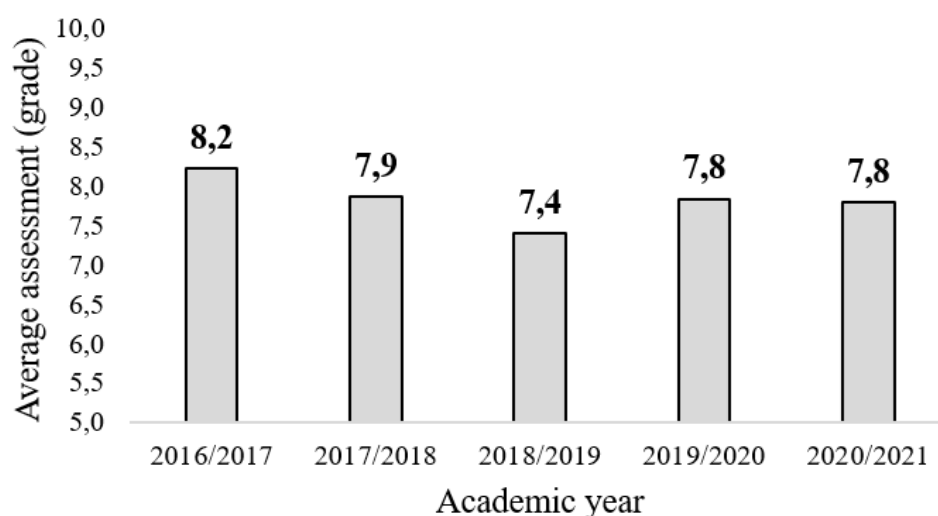
The topics of Bachelor's theses analyse a wide range of topics of public health, health promotion and prevention, environmental and occupational health and health care organisation, analysing both long-standing public health problems (such as the prevalence of smoking, addictive use of substances, sexual reproductive health, etc.) and relatively new challenges in the field, such as the relationship of COVID-19 to different health related outcomes: the impact of remote work on the spread of anxiety among employees during the restrictions imposed in Latvia due to COVID-19, combining work and private life during the restrictions imposed due to COVID-19 and its impact on health, the impact of ergonomic risks of the workplace on the spread of musculoskeletal system pain among remote performers of work during the restrictions imposed in Latvia due to COVID-19, etc.

The students' Bachelor's theses drafted during the reporting period (academic year 2016/2017-2021/2022), are grouped into the following thematic areas:

- 1) **public health, health promotion and prevention**, for example, Prevalence of sexually transmitted infections among men who have sex with men in Latvia; Prevalence of suicidal ideation, association with socio-demographic factors and the use of addictive substances among adult population in Latvia;
- 2) **epidemiology**, for example, Incidence of tick-borne encephalitis in Latvia from 2006 to 2016 in the context of public health; Incidence and mortality of cervical cancer in women in Latvia in 2000-2016; Characterization of chronic hepatitis C registered patients by demographic factors, geographic and risk factors in Latvia 2009-2018, etc.;
- 3) **environmental and occupational health**, for example, Real preparedness of employees for emergencies in Latvia; Assessment of employees regarding compliance with labour protection requirements in Latvia; Level of registration of accidents at work in Latvia;
- 4) **health care organisation, management and financing**, for example, Satisfaction of Latvian population with their family doctors; Characterisation and incidence of planned out-of-hospital births in Latvia and by region; Failure to visit of family doctors among the adult population of Latvia,

etc. (see Annex 22 “Topics of students’ graduation papers”).

The assessments of students’ Bachelor’s theses drafted during the reporting period (academic year 2016/2017-2021/2022) vary from 5 to 10, with the most frequent assessment (assessment mode) being 8. The average assessment during the reporting period remains relatively stable at 7.8 (see Figure.)



*Figure 1. Average assessment of Bachelor's thesis by academic years*

Enclosed:

Annex 22. Topics of students’ graduation papers.

### **3.3. Resources and Provision of the Study Programme**

**3.3.1. Assessment of the compliance of the resources and provision (study provision, scientific support (if applicable), informative provision (including libraries), material and technical provision, and financial provision) with the conditions for the implementation of the study programme and the learning outcomes to be achieved by providing the respective examples.**

The premises ensuring the study process (mainly at Kronvalda bulvāris 9, Dzirciema iela 16 and Anniņmuižas bulvāris 26a) are modern, well-equipped (each room as has a computer with internet connection, a projector, an interactive board). The premises have good lighting and are warm in the cold months of the year. Students have the option to download *MsOffice* for free to do their study work on personal computers, the possibility to use the *SPSS (Statistical Package for the Social Sciences)* software. Free internet and computers with internet connection (located in different places in the building of the education institution), are available to students in premises of the higher education institution. Common use premises have recreational areas, microwave ovens, a café and various vending machines are available to students.

The study base formed for the study direction is used for providing the StP – library, classroom, technical supplies (for example, the possibilities offered by the [Medical Education Technology](#)

Centre, the Anatomical Theatre, the [Department of Occupational and Environmental Medicine](#), etc. – replicas, simulations, technical equipment for different laboratory work, etc.), computers, cameras, internet connection, etc. Specific learning resources are almost entirely provided in e-studies, including descriptions of study courses, tasks and tests, if any, as well as required readings. Educational literature is mostly provided through e-books and e-journals or by scanning key pieces of text and by placing in e-studies, using internet sources – with a view to provide students with the possibility to read on e-devices (however, in some cases teachers specifically ask students to work in the library).

The library provides lecturers and students with access to Latvian and international electronic resources, including information in public health areas. The *SPSS* software is available on computers in the library. It should be noted that the Statistical Unit, by promoting the scientific activities of RSU students and lecturers, offers consultations on research methodologies, data input, the use of data processing programmes, methods of statistical processing of data, analysis, interpretation and graphic presentation of results.

Funding for purchasing scientific literature is allocated in the annual budget of the Department of Public Health and Epidemiology (DPHE) every calendar year, for example, every year DPHE subscribes to the “International Journal of Public Health” (*online* version) and the “American Journal of Epidemiology” (*online* version) from its budget. It should be noted that the funding specified below is for all study programmes provided by DPHE: Bachelor’s and Master’s study programmes, however, this does not limit the use and added value of scientific literature for students of different StP.

Table 5. Funding granted by the Department of Public Health and Epidemiology for purchasing of scientific literature

Calendar year	Assigned financing (EUR)
2022	1344
2021	3016
2020	2832
2019	2728
2018	2781
2017	2750
2016	2750

Lecturers of the Department of Public Health and Epidemiology have the opportunity to propose some literature they consider necessary by filling out the RSU form BK-1(5). Twice a calendar year, lists of scientific literature are drawn up and submitted to the RSU Library, followed by the purchase of the scientific literature. If budget funds are sufficient, additional funding may be granted to books, apart from that already granted to the department. Such activities provide access to the latest scientific literature in the sector in printed form. However, it is also important to note that



RSU is subscribed to a number of databases (for example, *Scopus*, *Ebrary*, etc.) which also provide industry-relevant literature.

In addition, one of the departments of the Library of Rīga Stradiņš University is also the World Health Organisation (WHO) Depository Library in Latvia. The Depository Library contains materials on WHO activities in the field of health protection all over the world, WHO bulletins, regulatory enactments, statistical data, reports and publications on AIDS and its control, alcohol abuse and smoking, cardiovascular diseases, environment and society, mother and child health, oncological and infectious diseases, mental health, nutrition and food safety, water supply and sewage, and other health care, environmental and social matters.

At the beginning of the implementation of each study course, the head of the study course, together with the department assistant re-organises the e-studies website, updating tasks and lists of readings. In order to improve the compliance of the library collection with the needs of students lists of study course readings are revised, there is cooperation with university lecturers to inform about the situation with supplies of study course literature and popularise e-resources, while users have the possibility to fill an electronic questionnaire for supplementing the library collection. The lecturer continues to work on the website during the implementation of the study course, using it also for communication with students, notices and answers to questions. In order to ensure deeper integration of the e-environment in the study process, there are plans to develop the diversity of tools offered by the *Moodle* environment – to diversify tasks and forms of communication.

Before the Covid-19 pandemic in March 2020 the RSU Library at Dzirciema iela 16 was available to students and lecturers 24/7. Its availability is the same now (in September 2022).

Due to the announced Covid-19 pandemic, from 11.03.2020 restrictions have been set in the organisation of the study process by a rector's order: regular lectures have stopped. The study process continued using the e-studies environment and IT tools. It should be noted that RSU quickly responded to the changed reality and provided all lecturers with regular IT training on the use of different platforms and tools. The RSU Information Technology Department continued training lecturers also in academic year 2022/2023. Lecturers had the possibility to apply for individual consultations with IT specialists without restrictions. Informative meetings were organised for students by the management and the department to explain what was going on and to talk about potential future development scenarios.

The Student Union provided an opportunity to apply for those 1<sup>st</sup> year students, who did not have computer equipment, as well as allowed them to stay in RSU premises to participate in remote lectures and classes, if they did not have such an opportunity at home. Lecturers were also supported with computer equipment and cameras. Those lecturers, who did not have the technical supplies, could receive it from RSU, as well as read lectures and classes from RSU premises.

Different RSU departments and structural units (Centre for Educational Growth, Doctoral School, Information Technology Department) offer different continuing education improvement opportunities on different topics, for example, mastering of digital tools, mastering of interactive methods, preparation of scientific articles, information in different databases, platforms for use of references, opportunities provided by different platforms, etc. For example, in academic year 2021/2022, to respond to the rapidly changing study environment, the Centre for Educational Growth organises training on hybrid studies helping lecturers to understand the combined study process, when lectures and classes should be read to those, who are in the auditorium, and to those, who study remotely.

RSU organises the Research Breakfast inviting lecturers, students and other interested persons to participate and including different topics. For example, to present the performance of RSU in the

national research programme “Life with Covid-19”, research data were actively presented at several Research Breakfasts in academic year 2020/2021.

Taking care of mental and physical health of employees, RSU offers to attend the gym, as well as organised sports classes for lecturers at the Faculty of Continuing Education. Covid-19 affected the possibilities to attend sports classes, but the welfare of RSU employees is still a priority. In addition, during the Covid-19 pandemic, in cooperation with the [Department of Psychosomatic Medicine and Psychotherapy](#) employees and students were offered to receive consultations for the preservation and improvement of mental and physical health.

Enclosed:

Annex 23.2. Assessment of the informative and methodological provision regarding library resources for the implementation of the Public Health and Social Welfare Faculty study programmes in accordance with the requirements of the guidelines.

Annex 23.3. Assessment of the information and methodological base on IT resources.

**3.3.2. Assessment of the study provision and scientific base support, including the resources provided within the framework of cooperation with other science institutes and higher education institutions (applicable to doctoral study programmes) (if applicable).**

Not applicable.

**3.3.3. Indicate data on the available funding for the corresponding study programme, its funding sources and their use for the development of the study programme. Provide information on the costs per one student within this study programme, indicating the items included in the cost calculation and the percentage distribution of funding between the specified items. The minimum number of students in the study programme in order to ensure the profitability of the study programme (indicating separately the information on each language, type and form of the study programme implementation).**

The study programme is planned to be financed from state budget funds and the funds of individuals and legal entities setting the tuition fee in accordance with the state budget funding without social security of EUR 4890 per year of studies. The tuition fee can be subject to discounts in accordance with internal norms and regulations. The number of students planned to be achieved in the StP in four years of studies is 112 students, enrolling 29 students in the first year of studies and planning a small drop-out in the following years. Following high inflation and under conditions of a rapid increase in prices of energy sources, the result of the study programme is negative, because there is shortage of funding from state budget funds in accordance with CM Regulations No.994 – study base costs no longer cover infrastructure maintenance costs. The information on additional performance funding allocated, which was approved in the budget of the Ministry of Education and Science, will be available in the second half of 2023.

The funding is used for staff remuneration, attraction of visiting university lecturers, taxes, maintenance of IT infrastructure, purchase of equipment and devices and study visit costs. In

addition to the direct costs of the implementation of lectures and classes, the StP must cover the infrastructure maintenance costs (facilities, IT solutions) and other RSU common resources used in StP (Student Service, Library, organisation of the study process, grant for the Student Union and other support and administrative functions).

StP is implemented by RSU Faculty of Public Health and Welfare Department of Public Health and Epidemiology, Department of Welfare and Social Work, Department of Sports and Nutrition, Department of Health Psychology and Pedagogy and Department of Nursing and Obstetric Care, Faculty of Medicine Department of Anaesthesiology and Intensive Care, Department of Occupational and Environmental Medicine, Department of Biology and Microbiology, Department of Human Physiology and Biochemistry, Department of Obstetrics and Gynaecology, Department of Physics, Department of Family Medicine, Department of Internal Diseases, Department of Surgery, Department of Paediatrics, Department of Pathology, Department of Psychiatry and Narcology, Department of Psychosomatic Medicine and Psychotherapy, Statistical Unit, Department of Health Psychology and Pedagogy, Institute of Anatomy and Anthropology Department of Morphology and Statistical Unit, Faculty of Pharmacy Department of Pharmacology, Institute of the History of Medicine, Language Centre and Library. Remuneration of the academic staff in the first year of StP is planned to be approximately 78 thousand EUR.

Table 6. Information on student costs

<b>Name</b>	<b>Result with the existing tuition fee</b>	<b>Result with the projected tuition fee</b>
Average income per student, EUR	4559	4624
Average cost per student, EUR	5829	5829
Academic staff, %	46	46
Department resources, %	3	3
Other direct expenditure, %	1	1
Costs of students' clinical training and placement, %	1	1
Scholarship costs, %	4	4
Fixed costs, %	5	5
Overheads, %	40	40

The number of students (112) indicated in the budget estimate for the programme in 4 years of study is the optimal group size. The cost-effectiveness of the study programme is not related to an insufficient number of students, but to insufficient funding from the State budget. The State budget funding for 1 budget place as of 1 September 2023 is EUR 5554 per academic year. There are 97 budget places, but the programme also has fee-paying students with an Excellence Discount, who ensure that the drop-out expenses are covered in the final years of their studies. The cost per student per academic year for the Public Health programme is EUR 5829. The cost-

effectiveness of the study programme is planned to be achieved by gradually increasing the tuition fee for fee-paying students and by optimising the study organisation process: reviewing the proportion of classes and lectures, ensuring that there are two full groups each year and keeping a close eye on the number of students in groups, merging them as necessary. In the budget proposals for 2024, the Ministry of Education and Science has submitted a request to increase the base cost of one study place to EUR 1 867.60, while the Ministry of Health has requested that the Health care study programmes be funded at the optimal ratio, which would increase the funding of 1 budget place to over EUR 6500, which would be sufficient to ensure the cost-effectiveness of the study programme.

### 3.4. Teaching Staff

**3.4.1. Assessment of the compliance of the qualification of the teaching staff members (academic staff members, visiting professors, visiting associate professors, visiting docents, visiting lecturers, and visiting assistants) involved in the implementation of the study programme with the conditions for the implementation of the study programme and the provisions set out in the respective regulatory enactments. Provide information on how the qualification of the teaching staff members contributes to the achievement of the learning outcomes.**

Highly qualified lecturers (professors, assistant professors, lecturers) and practising specialists participate in the implementation of StP “Public Health”. A total of 60 lecturers are involved in the study programme – RSU permanent lecturers, invited teaching staff from other Latvian universities (for example, in the implementation of the study course “Placement in Biology and Ecology”), industry professionals (for example, from the Centre for Disease Prevention and Control) and support staff.

36 of the lecturers involved in the implementation of the StP have been elected to RSU academic positions. 8 of the 36 academic staff representatives are professors, 6 are associate professors, 11 are assistant professors.

The composition of teaching staff in the study programme is stable. Lecturers have both academic and practical work experience in the field of public health. In the reporting period, changes in academic staff have occurred among both permanent lecturers and invited teachers. To promote the achievement of the aim of the study programme and learning outcomes, lecturers with extensive academic and professional experience are involved in teaching of study courses.

- Study courses “Public Health”, “Prevention, Health Promotion and Education” – prof. **Anita Villeruša**, lecturer of the Department of Public Health and Epidemiology, director of Master’s study programme “Public Health”, recognised public health professional, Chairwoman of the Board of the Public Health Association of Latvia, Chairwoman of the Scientific Council and leading researcher of the Institute of Public Health. Long-term cooperation has been established with the Ministry of Health of the Republic of Latvia, the Centre for Disease Prevention and Control, the National Health Service and other institutions. She participated in scientific projects related to public health, for example, project *Healthyboost R085* “Urban Labs for Better Health for All in the Baltic Sea Region – boosting cross-sectoral cooperation

for health and wellbeing in the cities" (*Healthy Boost*), No. #R085.

- Study courses "Introduction to Public health", "Public Health", "Basics of Research Methodology", "Research Project" – assoc. prof. **Inese Gobīna**, lecturer of the Department of Public Health and Epidemiology, expert of the Latvian Council of Science, member of the Public Health Association of Latvia and the International Epidemiological Association. Participates in international scientific projects on a regular basis: from 2021 to 2022, leading researcher in the "Evaluation of the impact of alcohol control policies on morbidity and mortality in Lithuania and other Baltic states", from 2020 to 2021, leading researcher in NRP "Impact of Covid-19 on the health care system; experience and future solutions", from 2019 to 2021, leading researcher in the *EU Interreg* project "Healthy Boost", etc.
- Study courses "Training Methods in Health Education", "Epidemiology of Infectious Diseases" – assoc. prof. **Anda Kīvīte-Urtāne**, lecturer of the Department of Public Health and Epidemiology, director of the Institute of Public Health, leading researcher – scientific project manager in the project "[First Steps Towards the Realisation of Personalised Cervical Cancer Screening Project](#)" (in English – [here](#)). Participated in Covid-19 related projects, one of them in the national research programme of 2020-2021 for the reduction of Covid-19 consequences "Multidisciplinary Approach to Monitor, Mitigate and Contain COVID-19 and Other Future Epidemics in Latvia". Several other projects were implemented in cooperation with the Ministry of Health of the Republic of Latvia. In recent years, the assoc. prof. participated in the Conversation Festival LAMPA discussing topical public health issues with other professionals.
- Study courses "Occupational Medicine, Occupational Health and Civil Protection", "Vertical Integration Project Ergonomic Workplaces in a Healthy Environment" – prof. **Ivars Vanadzīņš**, lecturer of the Department of Occupational and Environmental Medicine, director and leading researcher of the RSU Institute of Occupational Safety and Environmental Health. From 2017 to 2020 participated in the ERDF project "Analysis of characteristics of medical sapropel and its usage for medical purposes and elaboration of industrial extraction methods", in 2021 supplemented his knowledge in the *DNV International Accreditation Standard Training – DNV-DS-HC-102*.
- Study courses "Psychology in Public Health", "Health Pedagogy" – assistant professor **Inese Stars**, lecturer of the Department of Public Health and Epidemiology, researcher.
- Study course "Public Health" – assistant professor **Toms Pulmanis**, vice-dean of the Faculty of Public Health and Welfare, lecturer of the Department of Public Health and Epidemiology, member of the board of the Public Health Association of Latvia, long-standing expert in mental health, in 2022 participated in the preparation and submission of the *European Universities* initiative project *Nordic Social Design for European Values – education and research for wellbeing, health, a sustainable society and a good life for all (NOSEVA)* together with representatives of higher education institutions from Finland, Sweden, Norway, Poland, Lithuania, Turkey and Portugal.
- Study course "Public Health" – assistant professor **Dins Šmits**, lecturer of the Department of Public Health and Epidemiology and the Department of Applied Pharmacy, RSU Advisor to Rector on Strategic Development, member of the board of the Healthcare Employers' Association. He supplements his knowledge in courses on a regular basis, for example, "International Summer School on Integrated Care", Oxford University, Wolfson College, Oxford (United Kingdom).

The experience and employment of lecturers make it possible to include in study courses latest news in the field of public health, a reflection of the existing situation in the sector.

Application and selection procedure of the academic staff at RSU is regulated by the [Regulations of Rīga Stradiņš University on Academic Staff Positions](#) (Latvian only) and Rīga Stradiņš University

Process “Elections of Academic Staff”.

To promote the development of public health as an academic discipline, four lecturers involved in the implementation of the StP study in the doctoral study programme “Medicine” of Rīga Stradiņš University: Solvita Kļaviņa-Makrecka, Mirdza Kursīte, Laura Isajeva and Kristīne Ozoliņa.

Lecturers of the Department of Public Health and Epidemiology improve their qualifications in training and courses organised by the RSU Centre for Educational Growth and outside RSU. For example, in academic year 2020/2021, lecturers of the department attended the following qualification improvement measures and received certificates:

- *Creating Engaging and Interactive Online Course Design and Delivery* (in English),
- *Panopto* platform,
- Creating interactive content in the e-learning environment (H5P),
- E-learning training: work in e-academic performance,
- Basic possibilities of *Zoom* platforms,
- Advanced leading of *Zoom* interactive lectures and classes,
- Creating tests in the e-learning environment,
- Planner – a tool for organisation of tutorials,
- Remote testing possibilities,
- Registering attendance in the e-learning environment,
- Interactive presentations and real-time feedback in the *Mentimeter* tool,
- Visualisation of content in presentations,
- Remote group work of students using the *Miro* tool,
- Emotional aspects of lecturer’s work: impact of the remote study process on the lecturer of students,
- Advice to the lecturer how to organise active learning in online classes,
- Studies with interactive video content,
- Assessment approaches and types of examinations in remote studies,
- Writing scientific publications: friendly guide for lecturers,
- Role of interactivity in the study process,
- Creating videos: complex in a simple and short way,
- Seminar for heads of study programmes,
- Emotional aspects of lecturer’s work or how to work with students constructively in a remote format,
- Potential of immersive technologies for efficient learning strategies,
- Possibilities and functions of the new *Web of Science* platform,
- Emotional aspects of lecturer’s work: constructive cooperation and defining boundaries in the study process,
- Creating animated visual study materials,
- *Google* tools – assistant in the implementation of the remote study process (classes).

In academic year 2021/2022:

- Hybrid model 2021 = How to lead learning in class + remotely,
- Digital Darwinism – what it means for us each and our institution,
- Possibilities and comparison of *Web of Science* and *Scopus* databases,
- *EndNote* tool for management of references online,
- Systematic overview: looking for and organising evidence,
- Evidence-based medicine information databases,
- Skill management possibilities in study programmes,
- How to promote the acquisition of transversal skills relevant to the working environment in

the study process,

- *Turnitin*: how to assess students' papers more qualitatively and effectively?
- Assessment through technology,
- *PubMed* database and its tools for searching scientific publications,
- How to protect oneself from burnout (in English),
- Think tank: how to assess to learn?
- Open access to scientific information,
- Drafting of interactive study materials (H5P),
- Mapping workshop for study programmes of the study direction "Health Care",
- Seminar for directors of study programmes,
- Processing of photos for visually appealing study materials,
- Think tank: feedback as a sources of cognition and possibility to improve oneself,
- Systematic overview: looking for and organising evidence,
- Remote group work of students using the *Miro* tool,
- Interactive presentations and real-time feedback in the *Mentimeter* tool,
- Evidence-based medicine information databases,
- Qualitative research methods,
- Mediation – wilful and responsible conflict resolution culture at a university.

Lecturers and teaching staff are regularly welcomed to make more active use of the opportunities offered by e-studies, are informed of the opportunities of using e-studies to attend educational seminars organised by the RSU Centre for Educational Growth to strengthen their skills. Information on the possibilities to master various IT tools is actively sent to lecturers on a regular basis by the RSU Information Technology Department. Part of lecturers are actively involved in mastering new skills to provide the content of the course in the e-environment more successfully.

The diverse experience of lecturers (both in professional practice, research and social policy-making, participation in international projects) enables them to provide students with current knowledge, to share practical experience and examples, and students highly appreciate this, and to prepare the study course in such a way to synthesise theory and practice.

Different RSU structural units are involved in the implementation of StP study courses: [Department of Public Health and Epidemiology](#) (in English – [here](#)), [Statistical Unit](#) (in English – [here](#)), [Department of Biology and Microbiology](#) (in English – [here](#)), [Department of Occupational and Environmental Medicine](#) (in English – [here](#)), [Department of Health Psychology and Pedagogy](#) (in English – [here](#)), [Institute of Anatomy and Anthropology](#) (in English – [here](#)), etc.

### **3.4.2. Analysis and assessment of the changes to the composition of the teaching staff over the reporting period and their impact on the study quality.**

Highly qualified lecturers who are experts in the field and specialise in the respective study course topics are involved in the implementation of StP.

The Department of Public Health and Epidemiology has long-term cooperation with most of the invited adjunct lecturers (for example, Rita Kubuliņa, Solvita Melne, Ausma Golubeva, etc.). The composition of permanent lecturers is also stable and the number of permanent lecturers has increased since accreditation. The number of lecturers with a doctoral degree has increased, for example, Assistant Professor Dins Šmits (2018), Assistant Professor Toms Pulmanis (2019), Assistant Professor Inese Stars (2019), Assistant Professor Anita Kokarēviča (2020), Assistant

Professor Aija Bukova-Žideļūna (2021) defended their doctoral thesis and obtained a scientific degree in the reporting period.

The programme employs also the lecturers, who represent employers, for example, Dzintars Mozgis, Deputy Director of the Centre for Disease Prevention and Control.

StP graduates working in the field of public health are involved as adjunct lecturers to the extent possible. In individual cases, these colleagues prospectively continue their professional growth as RSU lecturers and heads of study courses (for example, lecturer Solvita Kļaviņa-Makrecka, Assistant Professor Toms Pulmanis).

### **Impact on the quality of studies**

The relationship of the composition of teaching staff to the quality of studies should be analysed taking into account the quality indicators, which include the content and individual level (students, lecturers) and is based on the principle of student-centred approach.

Achievements of students as well as the assessment of lecturers' work in student surveys provide a basis for assessing the quality of studies:

- topicality and modernity of the study course;
- use of theoretical knowledge at practical classes, seminars;
- compliance of tests with the content of the study course;
- information and training materials available in the e-study environment and their relevance for learning the content of the study course;
- lecturer's competence in the topic of study courses;
- participation of students in the mastering of the study course;
- feedback of the lecturer on the content of the study course and the assessment received;
- lecturer's attitude to students.

When evaluating lecturers' work, students in surveys appreciate and thank for the contribution of lecturers, are able to identify benefits of the study course and the future use of knowledge and skills in the profession.

**3.4.3. Information on the number of the scientific publications of the academic staff members, involved in the implementation of doctoral study programme, as published during the reporting period by listing the most significant publications published in Scopus or WoS CC indexed journals. As for the social sciences, humanitarian sciences, and the science of art, the scientific publications published in ERIH+ indexed journals or peer-reviewed monographs may be additionally specified. Information on the teaching staff included in the database of experts of the Latvian Council of Science in the relevant field of science (total number, name of the lecturer, field of science in which the teaching staff has the status of an expert and expiration date of the Latvian Council of Science expert) (if applicable).**

Not applicable.

**3.4.4. Information on the participation of the academic staff, involved in the implementation of the doctoral study programme, in scientific projects as project**



**managers or prime contractors/ subproject managers/ leading researchers by specifying the name of the relevant project, as well as the source and the amount of the funding. Provide information on the reporting period (if applicable).**

Not applicable.

**3.4.5. Assessment of the cooperation between the teaching staff members by specifying the mechanisms used to promote the cooperation and ensure the interrelation between the study programme and study courses/ modules. Specify also the proportion of the number of the students and the teaching staff within the study programme (at the moment of the submission of the Self-Assessment Report).**

Within the framework of the StP, cooperation between the lecturers of different study courses is promoted to create optimal and logically sequential content of study courses and the planning of the course by study semesters, thereby ensuring that the knowledge from previously mastered courses serves as the basis for successful mastering of the next courses, as well as to adapt the content of the courses to be studied to the specificity of the speciality.

Information on the necessary improvements in the content and/or planning of study courses is obtained from:

- questionnaires completed by students after each course. For example, based on the student recommendations in the study course assessment questionnaires, the planning of the study course “Basics of Public Health” was reviewed in academic year 2021/2022, allowing more time for independent and group work;
- informal discussions with students on the progress of the study process, problems experienced, etc. (performed by the director of StP). For example: 1) in cooperation with the head of the study course “Histology”, the content of the course was reviewed, making it more appropriate for the needs of public health professionals; 2) after discussions with the heads of study courses “Epidemiology” and “Research Methodology Course for Public Health Professionals”, work has been commenced on updating the content of these courses, creating a more pronounced synergy between the content of these courses;
- discussions with lecturers of study courses regarding the planning of courses by semester, including in relation to the mastering of other courses (performed by the director of StP). For example, from the academic year 2022/2023, the study course “Environmental Health I” is studied in semester 3 and 4 rather than in semester 2 and 3, thus improving the sequence of study courses;
- StP quality councils, which include lecturers of the programme and representatives of students.

Based on the information obtained, the Director of StP acts as a mediator, as necessary, in order to facilitate discussion among the heads of specific study courses for the improvement of course content.

The ratio of the number of students and teaching staff in the study programme: 123 students and 57 lecturers. The ratio of the number of students and teaching staff is 2.2.

# Annexes

III - Description of the Study Programme - 3.1. Indicators Describing the Study Programme		
Sample of the diploma and its supplement to be issued for completing the study programme	24.1_Anx_Sample_Diploma_and_Supplement_PBSP Publ_Health.pdf	24.1_pielik_Diploms un pielikums_PBSP Sab_ves.pdf
For academic study programmes - Opinion of the Council of Higher Education in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions (if applicable)		
Compliance of the joint study programme with the provisions of the Law on Higher Education Institutions (table) (if applicable)		
Statistics on the students in the reporting period	16_Anx_Student statistics_PBSP Publ_Health.pdf	16_pielik_Studejoso statistika_PBSP Sab_ves.pdf
III - Description of the Study Programme - 3.2. The Content of Studies and Implementation Thereof		
Compliance with the study programme with the State Education Standard	17.1_Anx_Compl_with_Nat_Ed_Stand_PBSP Publ_Health.pdf	17.1_pielik_Atbalst_valsts_izgl_stand_PBSP Sab_ves.pdf
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard or the requirements for professional qualification (if applicable)	18.2_Anx_Compl_StP_with_Professional Standard_Publ_Health.pdf	18.2_pielik_StP_atbalst_profesijas standartam_PBSP Sab_ves.pdf
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)		
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	18.1_Anx_St course mapping to achieve learn_outcomes_PBSP Publ_Health.pdf	18.1_St_kursu_kartej_st_rezult_sasn_PBSP Sab_ves.pdf
The curriculum of the study programme (for each type and form of the implementation of the study programme)	19_Anx_PBSP Public health_Plan for full time studies.pdf	19_pielik_PBSP Sabiedribas veseliba_planojums.pdf
Descriptions of the study courses/ modules	20_Anx_Study_course_description_PBSP_Pub_Health.pdf	20_pielik_Kursu_apr_Sab_Ves_PBSP.pdf
Description of the organisation of the internship of the students (if applicable)	9_Anx_Organisation of student placement_PBSP Publ_Health.pdf	9_pielik_Studejoso prakses organizacija_PBSP Sab_ves.pdf
III - Description of the Study Programme - 3.4. Teaching Staff		
Confirmation that the academic staff of the doctoral study programme includes not less than five doctors, of which at least three are experts approved by the Latvian Council of Science in the branch or sub-branch of science in which the study programme intends to award a scientific degree (if applicable)		
Confirmation that the academic staff of the academic study programme complies with the requirements specified in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions (if applicable)		

# Dental Hygiene (41724)

Study field	Health Care
ProcedureStudyProgram.Name	Dental Hygiene
Education classification code	41724
Type of the study programme	First level professional higher education study programme
Name of the study programme director	Egita
Surname of the study programme director	Senakola
E-mail of the study programme director	Egita.Senakola@rsu.lv
Title of the study programme director	Medicīnas zinātņu doktora grāds
Phone of the study programme director	
Goal of the study programme	<p>1. To provide continuing education opportunities for students with secondary education and second and third level professional qualifications in dentistry and medicine to obtain first level higher professional education with a qualification of a dental hygienist.</p> <p>2. To train qualified health care specialists as part of a dental team, which carries out the prevention of oral diseases and the development, execution and evaluation of a clinical (periodontological) treatment plan, as well as provides infection control measures and maintains a safe environment in the dental office.</p> <p>3. To train a specialist who educates the public in the prevention of oral diseases and participates in the planning, organisation and evaluation of dental care in collaboration with the dental team and representatives of other fields.</p>
Tasks of the study programme	<p>1. To provide appropriate academic knowledge, attitudes and skills that will lead to the qualification at the end of the programme to carry out diagnostic, therapeutic and preventive work to improve oral health according to patient needs and public health promotion priorities with an understanding of the health care system.</p> <p>2. To motivate students to take professional, legal and ethical responsibility for their work.</p> <p>3. To develop the willingness to continue improving and evaluating one's professional qualification over a long period of time – the lifelong learning skill.</p> <p>4. To develop interpersonal communication skills in health care, as well as team-work skills.</p> <p>5. To promote the competitiveness of graduates of the programme in socioeconomic conditions in the local and international labour market.</p> <p>6. To use training systems and assessments that develop students' critical thinking and evidence-based approaches to health care.</p>

Results of the study programme	<p><i>Skills:</i></p> <ol style="list-style-type: none"> <li><i>1. The acquired knowledge of biomedical, general clinical medicine and dental sciences enables an understanding of normal and pathological conditions in dentistry and the application of modern public health care methods in dentistry.</i></li> <li><i>2. The student understands the basics of dental practice organisation. Understands medical ethics in relation to patients and colleagues.</i></li> <li><i>3. The student has an understanding of the principles of ergonomics in their professional work, are aware of the potential for developing occupational diseases, understand occupational safety and the importance of maintaining one's health.</i></li> <li><i>4. In cooperation with a dentist, the student is able to perform a clinical diagnostic examination of the patient's mouth, draw up, implement and evaluate a preventive, clinical periodontal treatment plan.</i></li> <li><i>5. The student is able to educate the public in the prevention of oral diseases and to evaluate the effectiveness of various health education programmes.</i></li> <li><i>6. Knows how to work with the dentist during medical manipulations and to carry out infection control measures in the dental office, maintaining a safe working environment in the dental surgery and providing a patient call-back system.</i></li> </ol> <p><i>Competencies:</i></p> <ol style="list-style-type: none"> <li><i>7. The student knows how to provide first aid in critical situations in the dental office.</i></li> <li><i>8. Able to plan and conduct simple scientific research in the fields of preventive dentistry.</i></li> <li><i>9. Knows how to practice oral hygiene care in all age groups, identifying at-risk groups.</i></li> </ol>
Final examination upon the completion of the study programme	<i>National examinations: Defence of the qualification paper. Prevention of Dental Diseases, Periodontology (practical and theoretical part).</i>

## Study programme forms

### Full time studies - 2 years - latvian

Study type and form	Full time studies
Duration in full years	2
Duration in month	0
Language	latvian
Amount (CP)	80

Admission requirements (in English)	<i>Specialised secondary education (dental assistant, dental nurse, dental technician, nurse or feldsher)</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>Dental Hygienist</i>

#### **Places of implementation**

<b>Place name</b>	<b>City</b>	<b>Address</b>
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

### 3.1. Indicators Describing the Study Programme

**3.1.1. Description and analysis of changes in the parameters of the study programme made since the issuance of the previous accreditation form of the study field or issuance of the study programme license, if the study programme is not included on the accreditation form of the study field, including changes planned within the evaluation procedure of the study field evaluation procedure.**

Table 1. Changes in StP parameters

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period	Planned changes within the assessment procedure
1.	Study direction	—	—
2.	Title of the StP	—	—
3.	Code according to the Latvian Education Classification	—	—
4.	Head of the StP	—	—
5.	Scientific degree of the head of the StP	—	—
6.	Objective of the StP		—
7.	Tasks of the StP	—	The tasks of StP have been clarified in accordance with the updated/submitted professional standard for a dental hygienist in 2022.

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period	Planned changes within the assessment procedure
8.	Learning outcomes to be achieved	—	The leaning outcomes have been clarified according to the aim and tasks. The aims of study courses have also been updated to comply with outcomes of the study programme.
9.	Final examination upon the completion of the StP	Since 2020, changes have been made to Periodontology – National degree examination for testing theoretical knowledge, a test with different types of questions has been developed in the e-learning environment.	—
10.	Type and form of studies	—	—
11.	Duration of implementation	—	—
12.	Language of implementation	—	—
13.	Workload of the StP (CP)	—	In accordance with amendments to Section 1(8) of the Law on Higher Education Institutions, which entered into force on 11 October 2022, the transition to the European Credit Transfer and Accumulation System will be implemented until 31 December 2024 by expressing credit points in whole numbers.
14.	Admission requirements	—	—

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period	Planned changes within the assessment procedure
15.	Degree to be awarded	—	—
16.	Qualification to be awarded	—	—
17.	Place of implementation	—	—

Table 1 demonstrates that, in preparing study programme documents for accreditation from the beginning of 2022, a mapping of the programme against the profession standard in force from 9.11.2004 was carried out. But in the 2022 period, the profession standard was again processed, with the study programme teachers, including programme director, asoc.prof./doc. E.Senakola involved in the new development process. At the end of 2022, the new profession standard was approved (Harmonised in the Tripartite Cooperation SubCouncil on Vocational Education and Employment, meeting of 14 December 2022, Protocol No 7). While overall, following the development of the standard, it was known that the programme was in line with the new profession standard, there was still a need for a new standard mapping. During this period, in accordance with amendments 11.10.2022. Section 1, Clause 8 of the Law on institutions of higher Education. In the paragraph providing for the transition to the European credit transfer and accumulation system (ECTS) by 31.12.2020, the study programme management and the participating teachers decided to amend the programme by changing the amount of credits and adjusting the content and titles for a total of 11 study courses. The updated study programme was mapped against the new profession standard.

No	Courses and codes 2022./2023.ac.y. (Will not be realized in 2023/2024.ac.y.)	New courses and codes 2023./2024.ac.y. Protocol No. 5-ZF-1/3/2023 (23.02.2023)
1.	Prevention of Dental Diseases ZHAS_026 (6 KP / 9 ECTS)	*** Prevention of Dental Diseases ZTMVK_072 (4 KP / 6 ECTS)
2.	Dental Public Health I ZHAS_045 (1 KP / 1,5 ECTS)	** Public Health Care and Prevention in Dentistry I ZTMVK_063 (2 KP/ 3 ECTS)
3.	Dental Public Health II ZHAS_046 (1 KP / 1,5 ECTS)	** Public Health Care and Prevention in Dentistry II ZTMVK_070 (2 KP/3 ECTS)



4.	Dental Anatomy ZHAS_001 (1 KP / 1,5 ECTS)	* Dental Anatomy and Cariology ZTMVK_064 (2 KP / 3 ECTS)
5.	Cariology ZTMVK_040 (2 KP / 3 ECTS)	
6.	Information literacy _015 (1 KP/1,5 ECTS)	**Information literacy B_025 (2 KP / 3 ECTS)
7.	Research Work in Dentistry ZHAS_015 (1 KP/1,5 ECTS)	**Research work in Dentistry ZTMVK_065 (2 KP / 3 ECTS)
8.	Orthodontics_011 (1 KP / 1,5 ECTS)	**Orthodontics ZTMVK_066 (2 KP / 3 ECTS)
9.	Oral pathology ZHAS_023 (1 KP/ 1,5 ECTS)	*General and Oral pathology ZTMVK_067 (2 KP / 3 ECTS)
10.	****General and Oral pathology PAK_050 (1 KP / 1,5 ECTS)	
11.	Periodontology ZHAS_044 (3 KP / 4,5 ECTS)	***Periodontology ZTMVK_068 (2 KP / 3 ECTS)
12.	Surgical Stomatology MUSZKK_006 (1 KP / 1,5 ECTS)	**Surgical Stomatology MUSZKK_024 (2 KP / 3 ECTS)
13.	Endodontics ZHAS_022 (1 KP / 1,5 ECTS)	*Endodontics and Dental Prosthetics ZTMVK_071 (2 KP / 3 ECTS)
14.	Dental Prosthetics ZHAS_009 (1 KP / 1,5 ECTS)	
15.	Ergonomics in Dentistry AUVMK_020 (1 KP / 1,5 ECTS)	* Environmental Occupational Health and Ergonomics in Dentistry AUVMK_055 (2 KP / 3 ECTS)
16.	Environmental Occupational Health for Dental Hygienists AUVMK_045 (1 KP / 1,5 ECTS)	

17.	Periodontology – State exam ZHAS_043 (1 KP / 1,5 ECTS)	*Prevention of Dental Diseases and Periodontology – State exam ZTMVK_069 (2 KP / 3 ECTS)
18.	Prevention of Dental Diseases – State exam ZHAS_042 (1 KP / 1,5 ECTS)	
19.	****Nutritional Science and Oral Health SUUK_101 (1 KP / 1,5 ECTS)	Erasmus project “Oral Hygienists in Changing World” ENG SUAS_001 (2 KP / 3 ECTS)
20.	****Basics of Biostatistics SL_005 (1 KP / 1,5 ECTS)	

\* Combined 5 study courses (1 +1 = 2 KP/3 ECTS).

\*\* 6 study courses have an increase in the number of KP from 1 to 2 KP/3 ECTS.

\*\*\* 2 study courses have a decrease in the number of KP/ECTS.

\*\*\*\* 3 study courses will not be implemented, their content is included in existing study courses.

New B study course " Oral hygiene in Changing World " 2 KP/3 ECTS.

### **3.1.2. Analysis and assessment of the study programme compliance with the study field. Analysis of the interrelation between the code of the study programme, the degree, professional qualification/professional qualification requirements or the degree and professional qualification to be acquired, the aims, objectives, learning outcomes, and the admission requirements. Description of the duration and scope of the implementation of the study programme (including different options of the study programme implementation) and evaluation of its usefulness.**

First level professional higher education study programme “Dental Hygiene” is included in the RSU Faculty of Dentistry. The title of the study programme and qualification to be acquired are interrelated and meet the admission requirements, aims and tasks, as well as learning outcomes of the programme.

**Requirements for starting the programme** – Special secondary education (dental assistant, dental nurse, dental technician, nurse or physician assistant). Knowledge previously acquired by applicants in the following disciplines are assessed – CE certificate in Latvian; CE certificate in maths; CE certificate in a foreign language or an international testing institution’s examination document. Applicants obtain assessment by completing an Objective Structured Professional Aptitude Test (OSPAT). The OSPAT test consists of several parts: a test with 30 different multiple choice test questions, an essay (the topic "Why do you want to be a Dental Hygienist?") and a discussion/interview in which the applicants can present himself in front of the commission.

First level professional higher education (fourth level professional qualification) shall be implemented after vocational secondary education. The duration of studies in full time studies is

two years, LQF/EQF 5 (level of the Latvian Qualifications Framework) Regulations on the Latvian Education Classification of 13.06.2017 (Reg. of the Cabinet of Ministers No. 322). The study programme corresponds to Regulations of the Cabinet of Ministers No. 141 "Regulations on the National Standard of the First Level Professional Higher Education" (as amended by CM Regulations No.347 of 29.05.2007).

Students obtain academic knowledge, practical and professional work skills in dentistry. Base study courses, medical and biological study courses, general medicine study courses and study courses related to dentistry are mastered during studies. The programme includes 49 study courses, but with implementing the transition to a European credit transfer and accumulation system (ECTS), 39 courses of study are foreseen in 2023/2024. ac.y. The study programme is implemented during 4 semesters (2 academic years). The study programme consists of theoretical and practical study courses, placement and a qualification paper, 80 CP/120 ECTS in total. The content of study courses and the professional qualification to be obtained corresponds to the profession standard of dental hygienist registered in the National Centre for Education coordinated at the meeting of the Tripartite Sub-council for Co-operation in Vocational Education and Employment of 14 December 2022, minutes No.7. <https://registri.visc.gov.lv/profizglitiba/dokumenti/standarti/2017/PS-234.pdf>

Dental hygienist is a dental care professional; works as part of the dental team and in cooperation with specialists from other sectors; participates in the planning of dental care and develops proposals for its improvement and implementation through patient-centred/-focused care; conducts prevention and clinical examination, evaluation and diagnosis of the patient's oral diseases; within the scope of its competence, independently takes measures for the prevention of oral diseases, treatment of teeth and tissues covering teeth (periodontium); ensures infection control measures; maintains a safe environment in the dental office; understands the healthcare system; educates the public in the prevention of oral diseases; complies with professional ethical standards; maintains and develops their professional knowledge skills and competences. A dental hygienist is a provider of dental services, works in dental and various profile medical treatment institutions (including offices), which are registered in the register of medical treatment institutions, may be a self-employed person.

Conformity of the content of the study programme with the professional qualification to be obtained, interlinking of aims, tasks and learning outcomes are confirmed by the mapping of study courses. It is known precisely, which study courses foster the achievement of the defined learning outcomes and therefore the implementation of aims and objectives of the entire programme. The mapping results show that the study courses of the programme provide an opportunity to achieve all the outcomes of the study programme (several study courses are linked to each learning outcome, mastering of which ensures the achievement of the learning outcome). The included study courses are justified and conform to the specifics of the study programme Dental Hygiene. Each study course is related to one of the outcomes of the study programme. The sequence of courses corresponds to the sequence in which they should be mastered: from simple basic courses in the first year to more complex – in the second year. Formulations of StP study course outcomes correspond to the outcomes of the study programme. Thus, it can be considered that the study programme has been created in a structured and consistent way to enable students to master in a logical sequence the study course materials, achieve aims and tasks, and defined learning outcomes of the programme, as well as obtain basic skills in research work in dentistry specialty. So that the graduate has all those skills that are described in the profession standard for dental hygienist. Overall, it can be said that the aim and tasks of the study programme Dental Hygiene, as well as the learning outcomes correspond to EQF/LQF level 5.

Enclosed:

Annex 24.1. Model diploma and supplement thereto.

### **3.1.3. Economic and/ or social substantiation of the study programme, analysis of graduates' employment.**

The results of surveys of students, employers and graduates are used for improvement of the quality of studies.

Historically, education of dental hygienists roots back to the United States. In 1913, dentist Alfred Fones introduced the term – “Dental Hygienist” and also educated the first dental hygienist Irene Newman. In Europe, education of dental hygienists developed rapidly only after the second world war. In Latvia, the first School of Dental Hygienists in the Baltics started its pedagogical activity in the Medical Academy of Latvia in 1995. To get admitted to the programme for dental hygienists, earlier it was necessary to get a diploma of a dental nurse or a general medical nurse (2 years), followed by one-year training course, obtaining the qualification of a dental hygiene (third professional qualification education level). The training programme operated until 2004 – 177 dental hygienists were educated. In 2007, the programme training Dental Hygienists at RSU was transformed into a 2-year training programme. Degree to be awarded: dental hygienist’s qualification (first level professional higher education) 80 CP/120 ECTS. In 2022, the total number of dental hygienists educated by RSU in Latvia reached 502. Study content at least at Bachelor level is required for integration of dental hygienists in public health care in changing market circumstances and in interdisciplinary teams. The study programme is currently in the process of transformation in the process of Bachelor’s education adding another 1-2 years of studies.

The Latvian Associations of Dental Hygienists (LADH) was established in 1997, and in 1998 the association got involved in the International Federation of Dental Hygienists (IFDH) as the 23rd country and the first country from Eastern Europe. Since 2016, LADH has been a member of the European Dental Hygienists Federation (EDHF). During all these years, lecturers of the study programme Dental Hygiene have been actively cooperating with all the above-mentioned associations. In 2020, the [European Dental Hygienists Federation developed common recommendations for the common Bachelor’s programme in Europe](#):

- To improve and harmonise dental hygiene study programmes across Europe respecting regional, socio-economic and cultural differences.
- To provide recommendations for a “Dental hygienist” curriculum that would be accessible to all dental education institutions, employers, including students themselves.
- To improve patient care safety using high level clinical and professional care at European and global level.

In 16 Member States of the European Union, dental hygienists can work autonomously in their practices. There are also opportunities to work in oral health care teams, specialised periodontology clinics, hospital oncology departments, elderly care at institutions, other public health care services. In Latvia, mostly dental hygienists work in private dental practices in teams with dentists, also concluding contracts with the National Health Service for the care of children and young people up to 18 years. We very much hope that in the future dental hygienists will also have the opportunity to work more in hospitals and social care institutions. Dental Hygiene StP is self-funded. We hope for state funded study places in the future, this will provide more possibilities for work in the state health system as well. Based on recommendations developed by the European Dental Hygienists Federation in 2020 for a common Bachelor’s Dental Hygiene programme, it is currently in the

process of being developed by RSU.

To improve the study process, students complete an assessment questionnaires for each study course in e-learning. In this way, students have the opportunity to express their opinion, suggestions regarding the content of the study course, the methods of implementation applied, the competence of lecturers and the teaching style. At the end of the study process, students are invited to complete the study programme assessment questionnaire, express their opinion regarding the study process and their satisfaction with their choice. Student activity in the assessment of study courses was variable. The collected data evidence that in the time period from ac.y. 2016/2017 to ac.y. 2021/2022 an average of 62% students of the programme completed study course assessment questionnaires. It has reached 83-96%. in the last two academic years. The summary of data on study course assessment questionnaires evidences that the average assessment of students on a scale from 1 to 4 is 3.88 and was not lower than 3.69 in the accreditation period. This indicator is considered high and makes it possible to conclude that the content and quality of the study course are appropriate.

In ac.year 2018/2019, an internal questionnaire was developed which is implemented in the internet (VisiDati.lv). In this survey, each student can comment anonymously and in a free form every study course, to make suggestions, express their emotions freely. Average responsiveness to this survey was 75-83%. Based on the opinion expressed by students and proposals on the organisation of the study process, changes are regularly made to the study content – planning of study courses within semesters and years of studies. The results of this survey are discussed at meetings of StP lecturers. Study process improvement opportunities are discussed also in student work groups, as well as course and group leaders. Students know that they can always get understanding, support in the study process and also influence and change it. Students have the opportunity to participate in decision-making structures of the university.

### **Trends and changes made:**

1. **Students have expressed their wish to deepen knowledge, skills and competence in individual study courses, which are more related to specialty in dentistry:** an equal distribution of lectures in each of the four semesters based on recommendations of students in StC Periodontology in ac.y. 2017/2018. In ac.year 2018/2019, dentist/specialist in periodontology U.Stāmere was invited to the StC as a lecturer. Until ac.year 2020/2021, the whole study course, based on the introduction of a new perio classification in the world. Different types of examination of students have been developed. The data of recent years evidence that students appreciate the process of implementation of the course. In surveys, students expressed a wish to obtain practical experience in work with children with special needs. In ac.year 2017/2018 a doctoral of physical and rehabilitation medicine A.Greitāne was invited, who works with cerebral palsy and autistic children. Students have the possibility to visit the Rehabilitation Centre “We are near you” and practically take care of oral health of these children. Students note in the survey that it is a very valuable experience.
2. In each year of studies, both in the RSU StC assessment and in the internal survey, students **expressed their dissatisfaction with the working style of individual lecturers**, then talks followed and, if necessary, another lecturer was invited. Examples include the study courses Economics and Business I and II. In the second semester of ac.y. 2019/2020, a long-time lecturer M.Kakse suddenly fell ill and we had to look for other lecturers. Students were not happy with them until the autumn of ac.y. 2021/2022 when we managed to attract a lecturer whose working style greatly satisfied students.
3. In each year of studies, both in the RSU StC assessment and in the internal survey, students **expressed their appreciation and gratitude to individual lecturers and departments**. For those lecturers who, students appreciated in dental study courses, public

gratitude as expressed every year in a small StP ceremony on graduation day and at a Christmas event, one lecturer was nominated for the annual award.

4. When discussing the structure of the study programme and the sequence of courses with second-year students and graduate representatives, **ammendments are regularly made to the StP planning** – changing the sequence of individual study courses, proportion, amount of lectures and seminars. Existing study courses are improved and new study courses are created in StP every ac.year, for example, in ac.year 2018/2019 a new study course “First Aid and Civil Defence” – 2CP.
5. Students have expressed a desire **to improve their clinical training opportunities and also get separate wardrobes to get changed**. Until January 2019, we rented premises for a clinical base unit (with 4 dental equipment units) in Riga, Bruņinieku iela 25. From the second semester of ac.year 2018/2019, students use workplaces in clinical practical classes in the state-of-the-art RSU Faculty of Dentistry clinical base unit in Riga, Dzirciema iela 20. Since autumn 2020, students have also had access to a separate changing room. Further, the surveys on the assessment of the study base contain only positive comments.
6. When the study mode switched to remote in March 2020, students expressed their wish during a discussion that **leading representatives of the prevention agents industry should be attracted to the study course Dental Diseases** instead of the clinical training on site, which could not be realised. A Philips seminar in 2 parts was provided in Zoom as a quick response to this advice of students. Part 1 – Teeth whitening, Part 2 – Electric tooth brushes (4 hours in total). Oral-B oscillating tooth brushes, their use and types (2 hours). 2-hours training seminar organised by TePe Clinic, “Better communication with a patient, better implant care, Oral health and TePe”. Students appreciated this in the previous survey in spring 2020. Furthermore, every academic year such seminars are provided in real life with practical classes.

The evaluation questionnaires completed by students at the end of each semester have provided significant information on the quality of studies, evaluating the content of study courses, their implementation methods, lecturer’s competence and work style.

Surveys of employers and graduates make it possible to evaluate the quality and compliance of learning outcomes with labour market requirements. In ac.year 2018/2019, StP administration created its own survey questionnaire for employers with 13 questions. The survey is performed on the internet (VisiDati.lv) and also in paper format at the events organised by the Latvian Dental Association. 12 respondents from all over Latvia answered to questions of the questionnaire in 2019. 14 respondents in 2020, 16 respondents in 2022. Overall, 72% of respondents are representatives of dental practices in Riga. All practices are glad to employ graduates of the study programme “Dental Hygiene”, clinical skills were evaluated as very good and good by 72% of respondents, the ability of the dental hygienist to cooperate with other members of the dental team was evaluated as very good by 79% of respondents. **Recommendations from employers:** Since 2020, they note very high theoretical preparedness of graduates (in the COVID-19 situation, there was more theory than practice). To give the more opportunity to representatives of regions of Latvia to learn the study programme “Dental Hygiene” (granting scholarships to students with very good achievements). To teach more communication skills with patients, care ethics, job security and infection control. All dental hygienists must also have assistant’s work skills. The results of the questionnaire are regularly presented to lecturers at the meetings of the structural unit. On the basis of these recommendations, we plan new B study courses “Infection Control”, “Dental Practice Management”.

The results of employment surveys make it possible to conclude that 92% of graduates of the study programme “Dental Hygiene” start or continue working in different dental practices immediately

after the end of the study process. Already while studying, more students work as dental assistants or dental nurses because they obtained that education before. A “step by step” education model.

**Summary:** Results of student, graduate and employer surveys are regularly conducted and analysed by study programme “Dental Hygiene” administration. Recommendations are implemented during the study process. Employers are involved in the process of defending State examinations and qualification work. Graduates and employers are also invited to study programme teaching staff meetings.

Employers appreciate the practical and professional skills of employees, especially in the areas of health and social care. The dental hygienist’s profession belongs to the five types of skilled work that will be most demanded in Europe in 2023 (European Labour Authority, Directorate-General for Employment, Social Affairs and Inclusion).

[https://eures.ec.europa.eu/five-demand-vocational-jobs-2023-2023-02-09\\_lv](https://eures.ec.europa.eu/five-demand-vocational-jobs-2023-2023-02-09_lv)

### **3.1.4. Statistical data on the students of the respective study programme, the dynamics of the number of the students, and the factors affecting the changes to the number of the students. The analysis shall be broken down into different study forms, types, and languages.**

Students use inbound and outbound mobility opportunities, the things learnt during the mobility are recognised.

Admission to StP “Dental Hygiene” in Latvian takes place every summer. StP has only places for tuition fee and the fee is comparatively high (4600 EUR per year – ac.y. 2022/2023). The dynamics of students admitted to the reporting period varied from 20 to 32 students. The dynamics of the number of students varied from the highest – 28 graduates in ac.y. 2017/2018 to the lowest – 15 graduates in ac.y. 2021/2022. This is explained by the COVID-19 period, when many students withdrew from studies due to financial considerations. The highest number of drop-outs – 6 was in ac.y. 2020/2021. In other academic study years it was from 0 to 5. Overall, when assessing the dynamics of the number of students – factors that have influenced it are: failure in 53.8% cases, at the student's own discretion in 30.8% cases and failure to resume studies after academic leave in 15.4% cases.

#### **Dynamics of the number of students of the RSU study programme “Dental hygienist” during six academic years**

<b>Academ. year</b>	<b>Number of applications</b>	<b>Budget places</b>	<b>Number of tuition fee places</b>	<b>Competition rate</b>	<b>Number of graduates</b>	<b>Number of drop-out students</b>
2016/17	34	-	32	1:1,1	24	5
2017/18	28	-	25	1:1,1	28	4
2018/19	34	-	21	1:1,6	24	0

2019/20	36	-	24	1:1.5	20	1
2020/21	29	-	20	1:1,5	22	6
2021/22	41	-	23	1:1,8	15	4

Student mobility is not possible in Erasmus long-term programmes because students do not wish to miss clinical practical classes and most combine the study process with work in dental offices, working as assistants and dental nurses. Students also participated in Nordplus and Erasmus+ blended intensive programme. **For details see 3.4.1** There is both outcoming and incoming mobility (one week exchange programmes). Details in Annex 8.2.

Enclosed:

Annex 16. Statistical Data on Students.

### **3.1.5. Substantiation of the development of the joint study programme and description and evaluation of the choice of partner universities, including information on the development and implementation of the joint study programme (if applicable).**

Not applicable.

## **3.2. The Content of Studies and Implementation Thereof**

### **3.2.1. Analysis of the content of the study programme. Assessment of the interrelation between the information included in the study courses/ modules, the intended learning outcomes, the set aims and other indicators with the aims of the study course/ module and the aims and intended outcomes of the study programme. Assessment of the relevance of the content of the study courses/ modules and compliance with the needs of the relevant industry, labour market and with the trends in science on how and whether the content of the study courses/ modules is updated in line with the development trends of the relevant industry, labour market, and science.**

The first level professional higher education study programme “Dental Hygiene” (80 CP/120 ECTS) includes study courses, which enable students to master main tasks of professional activity and perform duties in accordance with the profession standard coordinated at the meeting of the Tripartite Sub-council for Co-operation in Vocational Education and Employment on 14 December 2022, minutes No.7.

During studies, students have several placements 16 CP/24 ECTS to develop practical skills in educational and clinical work, which fosters also the choice of a topic of qualification papers. During placement, students get a complete idea of the amount of work of a dental hygienist by working in



dental clinics, performing educational work in pre-school educational institutions, schools, care institutions for the elderly people and patients with special needs. Placement regulations and methodological materials have been developed.

Overall, study courses and their content comply with the needs of the relevant industry and labour market and with latest science trends. This can be achieved by annual revision of the content of the study programme, the content of study courses, which is fostered by the RSU quality mechanism, feedback from university lecturers, students and placement supervisors, as well as consultation with the Board of the Latvian Associations of Dental Hygienists. StP content is learnt gradually, starting from knowledge, then initial clinical skills in a simulation environment, then in clinics with patients, and eventually in various practices. Professional study courses define the skills to be acquired, in general this is ensured by all clinical dental study courses (according to the profession standard for dental hygienists) and they represent 40% of all professional study courses. In general, professional study courses make up 60% of all study courses. Descriptions of certain high-quality skills in the RSU learning environment have been developed: for use and sharpening for plaque removal tools, dental floss application, video on supervised teeth cleaning, video on action in the event of tooth injury, video on oral cancer screening. The creation of skills descriptions and their addition to study course descriptions and skills assessment indicators have been developed. It is implemented in study courses: "Periodontology", "Periodontology – Preclinic and Clinic", "Clinical Placement", "Preventive Dentistry". Methodical materials for clinical work "Summary of Indices Used in Dentistry" have been developed, in ac.y. 2018/2019 during regular meetings of StP lecturers, progress of students in the study process are discussed, in particular in clinical study courses, which end with the National Degree Examination (NDE). NDE in Periodontology takes place in 3 parts, NDE in Preventive Dentistry – in 2 parts. National degree examinations use Respondus Lock Down Browser (Security browser to observe academic integrity). A competent team of lecturers has gradually emerged in professional study courses, which actively participates in the development of complex questions for NDE and provides tutorials for students before NDE. Descriptions of all study courses, placement and qualification papers, as well as NDE regulations, have been developed in a qualitative manner, in accordance with the requirements of regulatory enactments in RSU.

Study courses include the tasks aimed at studying latest scientific development trends in dentistry and practical application of this knowledge in qualification papers drafted by students. The contribution of dental hygienists to research in the world keeps growing. In 2016, the American Dental Hygienists' Association developed recommendations for scientific research directions in the dental hygienist's profession. Recommendations are also included in the StP qualification paper writing regulations.

The link between the content of studies and labour market needs may be ensured by professional and knowledgeable university lecturers. All lecturers of industry-specific study courses of the study programme also practically work in the field of dentistry allowing the content of the programme and study courses to be in harmony with the real work situation in dentistry in the country.

Enclosed:

Annex 17.1. Compliance of the Study Programme With the National Educational Standard.

Annex 17.2. Compliance of the study programme with the industry-specific regulations.

Annex 18.1. Mapping of the Study Courses for the Achievement of Learning Outcomes of the Study Programme.

Annex 18.2. Compliance of the qualification to be acquired upon completion of the study programme with the professional standard

Annex 19. Planning of the study programme (for each type and form of the implementation of the study programme).

Annex 20. Description of Study Courses.

**3.2.2. In the case of master's and doctoral study programmes, specify and provide the justification as to whether the degrees are awarded in view of the developments and findings in the field of science or artistic creation. In the case of a doctoral study programme, provide a description of the main research roadmaps and the impact of the study programme on research and other education levels (if applicable).**

Not applicable

**3.2.3. Assessment of the study programme including the study course/ module implementation methods by indicating what the methods are, and how they contribute to the achievement of the learning outcomes of the study courses and the aims of the study programme. In the case of a joint study programme, or in case the study programme is implemented in a foreign language or in the form of distance learning, describe in detail the methods used to deliver such a study programme. Provide an explanation of how the student-centred principles are taken into account in the implementation of the study process.**

Methods for the implementation of studies, including assessment, contribute to the achievement of the objectives and learning outcomes of the study courses and programme, the principles of student-centred teaching and learning are taken into account.

Until now, the study programme has been implemented only as full-time studies and in Latvian.

Study process is implemented mostly as interactive lectures, practical interactive classes or seminars and independent work of students. All the advanced technologies available at RSU are used during lectures and classes (high and low technology teaching approach). During their studies at RSU, students have a possibility to ask questions they are interested in, discuss them with the lecturer and fellow students. Problem-centred teaching strategies are used for studies. All additional study materials are freely available to the students in the e-learning environment. It also provides references to additional information sources for studying the specific issues, as well as materials for self-directed learning (for example, practical assignments that can be done at home).

Formative, summative and cumulative assessment is used in the studies. Formative assessment takes place during everyday study process: by asking control questions to the students during the contact lessons, as well as by discussing the independent works of students that are practised during the study process. Summative assessment takes place at the conclusion of each study course as a test or examination. Summative assessment tests are organised in a written form (in paper format or electronically) or as oral discussions. At the conclusion of studies, the students select a topic they are interested in and write and defend a qualification paper in cooperation with

the selected supervisor.

Student-centred approach at RSU corresponds to the needs of students and society as a whole. Dental Hygiene StP positions the learning needs of students highly to enable students to become shapers of their professional growth in the study process. Student-centred approach to learning – teachers still serve as an authority figure, but perform many functions a facilitator or “guide on the side”. Students assume an active role in the learning process. In this method, students learn from and are continually assessed in such activities as group work, involvement in lecturers and clinical and practical classes. Public activities of students are also assessment, such as voluntary participation in different oral health promotions events – campaigns “Fields enter cities” – 8 September 2018, “Gingival Health Week” – 7-12 May 2019, “Researchers’ Night at RSU” – autumn 2018, 2019, “World Oral Health Day” – 20 March 2022.

In the context of RSU’s student-centred approach, the student’s independent learning is promoted by clearly formulating the learning outcomes, the student is given the opportunity to familiarise with the learning outcomes of study courses, which can contribute to their self-assessment of their learning outcomes. Emphasis is placed on making the learning outcomes of study courses linked to the results of StP studies. The formulation of learning outcomes and their accessibility to students (in e-studies under the course description) ensure that the student and the lecturer have a common understanding of what requirements the student needs to meet, what knowledge and skills should be learned so that the student can follow his/her the progress and monitor his/her learning experience independently.

High-tech approach to learning – using laptops and tablets connected to internet students obtain information from around the world, technology plays an ever-greater role in the learning experience. In the teaching process, teachers utilize different technology. This approach has been clearly integrated since semester 2 of academic year 2019/2020, when studies were remote due to Covid-19. Even before that RSU actively used the *Moodle* environment in the learning process. Low-tech approach to learning – teachers adapt technology integration into the teaching process based on students’ abilities and needs. This becomes particularly important, taking into account each student’s digital competences. In transition to the remote study process, it is important to evaluate the capacity and skills of students in the successful use of technology for the organisation of the study process.

Example of the use of digital skills: 1. In individual study courses “Periodontology – Preclinic and Clinic”, “Periodontology’ and “Clinical Placement”, a digital patient periodontology examination chart ([Periodontal Chart online - www.perio-tools.com](http://www.perio-tools.com) ([periodontalchart-online.com](http://periodontalchart-online.com)) and a periodontal risk assessment chart ([Periodontal Risk Assessment \(PRA\) - www.perio-tools.com](http://www.perio-tools.com)) are used; 2. To respect academic integrity, students should use the Respondus LockDown Browser when they pass examinations. When mastering the study course further, students will have the opportunity to use other digital charts/instructions [perio-tools.com - Your online portal for periodontal tools!](http://perio-tools.com)

Blended learning is another strategy for teachers looking to better learn the needs of each student and include the use of more than one approach.

Each teacher chooses the most appropriate methods within his/her study course, according to the knowledge and skills to be learned. The study programme is implemented using lectures, lessons, classes, independent work. Lectures, presentations by visiting lecturers, discussions, oral presentations, role plays can be used during lectures and classes, and methods such as essays, reports, check-yourself tests, summaries and / or notes from books, reports, research projects, additional reading tasks, reflection on a video/film, making posters, brochure, infographics are used in the implementation of independent work. Students are given the opportunity to prepare, in a

transparent, and concise manner, information they might provide to Latvian population of different age groups to promote oral health. This, in particular, is implemented in study courses “Public Health Care in Dentistry I and II”, “Educational Work – Placement in the Promotion of Oral Health I and II”, “Preventive Dentistry”, “Communication with Patients in Paediatric Dentistry”, where students master different methods they will further be able to use in work with patients.

Range of methods used in classes/ seminars:

- team or working group building activities, “brainstorms” – students have the opportunity to share different ideas;
- case report (in all study courses related to clinical dentistry);
- group work – to achieve the joint goal, students master cooperation skills while working on a team;
- laboratory experiments (medicine-related study courses);
- problem solving activities;
- learning cafe –in study courses Preventive Dentistry, Public Health Care in Dentistry II).
- simulations give the opportunity to play out a variety of situations, digital simulation scenarios (in preclinical dentistry study courses);
- peer review – in all dentistry study courses;
- conducting discussions to develop leadership skills;
- students’ reflections on their knowledge and skills.

The above-mentioned examples make an insight how the aim of the study programme and StP outcomes are achieved. The methods used focus on promoting the aim of the study course through practical tasks.

Lecturers of study courses are asked to focus more on study forms and methods that contribute to the mastering of clinical and practical skills and abilities both in educational and clinical work. Within study courses, students of the 1st and 2nd year go to preschool education institutions, schools, dental clinics, institutions for patients with special needs and elderly people. The purpose of visits and placement is to get an idea on the dental hygienist’s profession, the knowledge, skills and competences necessary in this profession.

In academic year 2019/2020 RSU conducted a survey about studies in Covid-19 conditions. This survey should be particularly noted, because it was a way to snap the situation, when both students and lecturers faced an emergency, when studies were held remotely, for the first time. When the remote study process is organised, the administration and permanent lecturers of the study programme “Dental Hygiene” immediately organised regular Zoom meetings with students. All the problems in the study process were quickly and favourable resolved. There was regular communication by e-mail, phone, in WhatsApp. Individual students with emotional problems were supported in person. The Praise, Ask, Offer approach was used to provide feedback to students. This approach was use not only in the study process, but also in communication with students.

Overall, it can be said that different methods of implementation and assessment of studies promote the fulfilment of aims and outcomes of StP. A lot of work is ongoing for standardisation and objective assessment of types of examination, as well as development of interactive study materials (H5P).

#### **3.2.4. If the study programme envisages an internship, describe the internship opportunities offered to students, provision and work organization, including whether the**

**higher education institution/ college helps students to find an internship place. If the study programme is implemented in a foreign language, provide information on how internship opportunities are provided in a foreign language, including for foreign students. To provide analysis and evaluation of the connection of the tasks set for students during the internship included in the study programme with the learning outcomes of the study programme (if applicable).**

The link between knowledge and skills of students and real professional activity of dental hygienists, different study placements are organised in two years of studies (16 CP / 24 ECTS in total). Regulations are developed for each placement, there is student's placement logbook and a report on the performance of the given assignments (the materials are uploaded to the RSU e-learning environment). Students describe the fulfilment of placement assignments in the placement report (See Annex 9). The placement report is defended, the results obtained are reported at Study programme meetings of lecturers. The assignments included in placement are directly related to the study material previously learned by the student, clinical skills obtained in pre-clinic and clinic, as well as knowledge and skills for promotion of health and education (since 2022 also health literacy).

For the assessment of students' knowledge and skills in study placement, assessment criteria have been developed, based on which both the student and the placement supervisor assess the improvement of professional competence during placement. The results of placement are discussed in the defence of placement and are assessed with a grade. The assessment takes into account:

- assessment by the students and placement supervisor on the fulfilment of the aim and task of the placement;
- assessment of the analysis of placement results;
- assessment of the presentation of placement results.

The organisation and results of the placement are analysed at Study programme meetings, as well as reported at FD Council meetings. Strengths and weaknesses observed during placement, as well as recommendations of students are taken into account. Adjustments to study placement Regulations and process organisation are made if necessary.

A total of 4 placements are implemented (16 CP/ 24 ECTS in total):

Name of the placement	Place and time	Semester	CP/ECTS
Placement in the clinical environment	in the environment of clinical departments of the RSU Institute of Stomatology in all four semesters	Semester 1, 2, 3, 4	8 CP/12 ECTS
Periodontology – Preclinic and Clinic	within the study process at the RSU Faculty of Dentistry 1 <sup>st</sup> year of studies	Semester 1, 2	4 CP/6 ECTS

Educational Work – Placement in the Promotion of Oral Health I	in pre and primary schools, elderly care institutions and Riga city Day Centres	Semester 2	2 CP/3 ECTS
Educational Work – Placement in the Promotion of Oral Health II		Semester 3	2 CP/3 ECTS

Placement “Educational Work – Placement in the Promotion of Oral Health I” (2 CP/3 ECTS) and takes place in semester 2 in pre-school and elementary education institutions, as well as schools. In the implementation of this placement, students can use methodical materials developed by the Riga City Council and lecturer group (A. Brinkmane, E. Senakola, O. Veldre, A. Mironova): manual for teachers “Oral Health Study Programme for Preschool Education Institutions” – Riga, 2014, p. 1-58, booklet for parents of children, posters, stickers. Also the material “Methodical Recommendations for Teachers of Preschool Education Institutions in work with children on Promoting Oral and Dental Health in Relation to Healthy Dietary Habits” - Riga, 2018. p. 1-82 developed within the framework of the Ministry of Health, ESF project “Complex Measures for Health Promotion and Disease Prevention” in cooperation with lecturers of the study programme “Dental Hygiene” (E. Senakola, A. Brinkmane, A. Mironova). Placement “Educational Work – Placement in the Promotion of Oral Health II” (2 CP/3 ECTS) takes place in Semester 3 in ELDERLY care institutions and Riga City Day Centres. Due to the COVID-19 situation, placement in pre-school and elementary education institutions, schools and elderly care institutions was not implemented, but resumed in spring 2022. Summer placements at dental clinics were also implemented in 2021 and 2022.

Clinical Placement (8 CP/12 ECTS) takes place in the environment of clinical departments of the RSU Institute of Stomatology in all four semesters, as well as during summer placement in one of the dental clinics throughout the territory of Latvia (agreements are concluded). The placement also includes oral health care for disabled children with cerebral stroke and autism (Rehabilitation Centre in Riga “We are near you”). Due to the COVID-19 situation, no placement at the rehabilitation centre was implemented but it was resumed in spring 2022. The placement “Periodontology – Preclinic and Clinic” (4 CP/6 ECTS) takes place within the study process at the RSU Faculty of Dentistry in the 1<sup>st</sup> year of studies.

Students of the study programme “Dental Hygiene” often combine the study process at RSU with working at dental clinics because they have previously obtained dental assistant’s or dental nurse’s education. Thus, already existing employers offer placement sites to students and often also a workplace as dental hygienists after graduation. If students have difficulties finding a placement site, the study programme administration helps to find them in cooperation with the Board of the Latvian Association of Dental Hygienists and the Institute of Stomatology of RSU.

Readiness of students for the labour market requirements is confirmed by the fact that after clinical placement in a dental clinic a dental hygienist’s job is offered to the most knowledgeable and motivated students after they obtain their diploma. Placement supervisors (certified dentists or dental hygienists) also provide a brief characterisation of the student’s knowledge, skills and clinical skills, as well as attitudes during the placement, which is taken into account in defence of student placement, as well as in the improvement of the study process.

Enclosed:

Annex 9. Description of the Organisation of Student Placement.

### 3.2.5. Evaluation and description of the promotion opportunities and the promotion process provided to the students of the doctoral study programme (if applicable).

Not applicable

### 3.2.6. Analysis and assessment of the topics of the final theses of the students, their relevance in the respective field, including the labour market, and the marks of the final theses.

The development of a qualification paper is a part of the national degree examination. The requirements to qualification paper and its assessment at RSU are laid down in the [Regulations on Writing and Defence of Qualification Paper, Student's Research Paper, Bachelor's Thesis and Master's Thesis](#) (approved by Senate on 22.02.2022). In accordance with the requirements of these regulations, Methodological guidance on the development and defence of students' qualification papers were developed (approved at the at FD Council meeting on 15 June 2020).

Topics and supervisors of qualification papers are approved at the meeting of lecturers of the study programme 6 months before the expected defence of the paper. In order to promote the development of research skills of students, from the 1<sup>st</sup> year of studies students start research activities first by learning the study courses "Information Literacy", "Basics of Biostatistics", "Research in Dentistry", "Public Health Care in Dentistry I", and then by preparing a qualification paper. The qualification papers are defended under the supervision of a NDE commission. The commission is composed of the head of the commission representing dentistry work sector from an independent RSU body. According to the regulation (CM Regulations 512, 26.08.2014), at least half of commission members should be representatives of sectoral professional organisations and employers, as well as lecturers of the Faculty of Dentistry.

Thematic directions of qualification papers of students are defined in accordance with development of the dental industry and market, and topics and specialisation directions of projects implemented by lecturers of the study programme. Specific topics are offered to students, however, they can also choose them themselves and formulate together with scientific supervisors of qualification papers in the study programme.

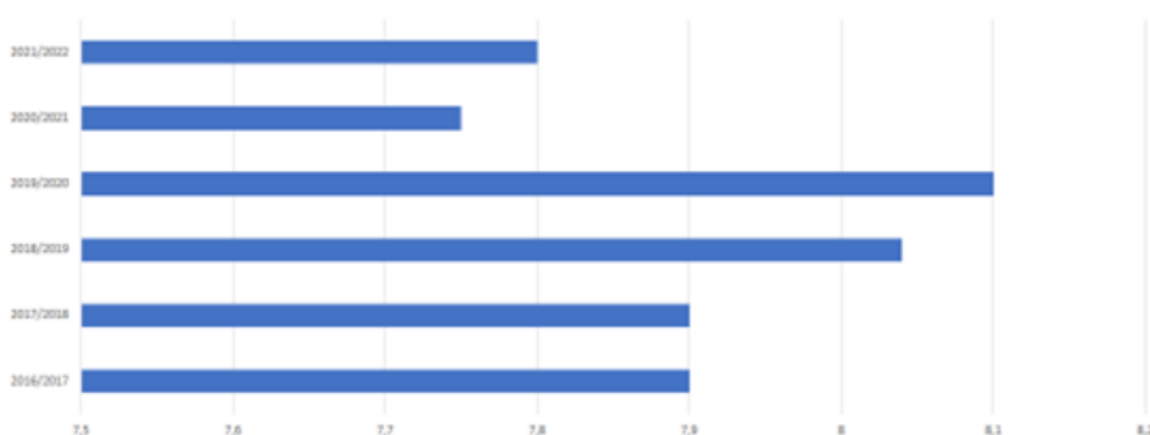
Overall, directions of qualification papers can be broken down into the following blocks (based on the research guidelines developed by the International Federation of Dental Hygienists in 2014):

- **Professional development opportunities for dental hygienists** (Global education models, Legislation to create and operate practices, Environmental health and Economics).
- **At patient level:** Promoting oral health in relation to various chronic diseases. Oral healthcare – new diagnostic, prevention and treatment methods in dentistry. Changing patient behaviour in dental practice.
- **At population level:** Evaluation of the availability and quality of healthcare services in dentistry. Epidemiology. Oral health and quality of life. Development and evaluation of various educational and prevention projects for the population in different age groups (including those with special needs).

International Federation of Dental Hygienists

Students receive an assessment for their final thesis by successfully defending it – presenting and answering questions of the NDE commission. It should be noted that papers of many students in the period being covered were assessed as excellent and have been a valuable contribution to Latvian dentistry research area. Since the management and lecturers of the study programme work specifically to guarantee the motivation of students and the quality of qualification papers, the overall quality of the qualification papers is good. The assessments of students' qualification papers drafted during the reporting period (ac.y. 2016/2017 – 2021/2022) vary from 5 to 10, the most frequent assessment (assessment mode) being 8. The average assessment during the entire reporting period remains relatively stable – 7.8 (see Figure 1), one of qualification papers assessed by the commission was assessed poorly. The best indicators (8.1) were reached in ac.y. 2019/2020.

**Average assessments of the qualification papers 2016-2022**



Enclosed:

Annex 22. Topics of students' final papers.

### **3.3. Resources and Provision of the Study Programme**

**3.3.1. Assessment of the compliance of the resources and provision (study provision, scientific support (if applicable), informative provision (including libraries), material and technical provision, and financial provision) with the conditions for the implementation of the study programme and the learning outcomes to be achieved by providing the respective examples.**

Since 2013, we have been using a leased study and clinical base unit in Riga, Bruņinieku iela 25. This clinical unit had 4 dental equipment units (the age of the equipment is about 17-18 years). It was necessary to buy new dental equipment. It was decided to stop leasing these premises and at



the beginning of 2019 the Dental Hygiene study programme fully returned to the premises of the RSU Faculty of Dentistry (Rīga, Dzirciema iela 20). This ensured successful integration of the study process within the RSU Faculty of Dentistry.

In 2019, after a repair, two additional administration buildings were obtained in Rīga, Dzirciema iela 20, on the basement floor, near student lockers. This makes it possible for permanent and invited lecturers to get workplaces also in administration premises. The dental hygienist program plans and purchases new tools/ equipment every academic year, as well as new and modern equipment for practical classes in the clinic. It can be mentioned here that in recent years the material base has been replenished with the latest Powder Jet equipment, Kavo ultrasonic scanners, Slow speed tip equipment for tooth polishing and diagnostic Foti camera (for caries diagnosis). All these equipment allows students to master the application of the latest technologies and replenish their knowledge in order to successfully enter the labour market after the end of their studies. It also ensures a high-quality study process for each student. By partnering with the company Philips, students have the opportunity to acquire knowledge of teeth whitening using the Philips Zoom whitening system.

The **Faculty of Dentistry**, including also the **Dental Hygiene study programme** has modern pre-clinic infrastructure with 3 rooms; preclinic virtual simulators with 2 rooms. The RSU Institute of Stomatology with all its infrastructure operates as a clinical base unit.

<https://www.rsu.lv/sia-rsu-stomatologijas-instituts>

The provision of e-resources for the "Dental Hygienist" study program includes four e-book databases and eight full-text journals databases.

**E-books** for dental hygienists are available in the subscription databases **ebook Academic Collection (EBSCO)**, **Ebook Central (Proquest)**, **AccessMedicine and ClinicalKey**. For example, the database ebook Academic Collection (EBSCO) has 28895 e-books in the section "Health and Medicine", and *Ebook Central (Proquest)* – 21885 e-books. Subscribed multidisciplinary databases *Ebook Central (ProQuest)* and *EBSCO eBook Academic Collection* offers e-books from a variety of publishers in a variety of disciplines that provide curated information results when searching for a wide variety of topics/keywords, e.g. *Ebook Central (ProQuest)* has 370 e-books on the topic "Dentistry" but the *EBSCO eBook Academic Collection* – 369 e-books. The *ClinicalKey* database includes book sections "Oral health", "Oral Hygiene", "Dentistry", "General Dentistry", Pediatric Dentistry, etc.

The full texts of **scientific articles** are available for dental hygienists in the subscribed databases: **Dentistry & Oral Sciences Source (EBSCO)**, **SAGE Premier 2023**, **Health Research Premium Collection (Proquest)**, **MEDLINE Complete (EBSCO)**, **BMJ Journals**, **Wiley Online Journals**, **Science Direct**, **Academic Search Complete (EBSCO)**. In Primo's unified search engine, 6,965 journal titles appear in the "Health Sciences" sector, and 217 journal titles in the "Dentistry" sub-sector.

For the Faculty of Dentistry the e-resource **DentalMammoth** is subscribed, which covers all the basics of dentistry and is suitable for both practicing professionals and dental students. DentalMammoth covers all areas of dentistry, such as diagnostics, cariology, dental hygiene, endodontics, periodontology, dental prosthetics, oral, maxillofacial surgery, orthodontics, dental office hygiene, ergonomics, etc. c.

**Dissertations** from many countries of the world in various branches of science, including dental hygiene, are available in the database *ProQuest Dissertations & Theses Global: The Sciences and Engineering Collection*.

Students also have access to such **news and reference databases** as *Encyclopedia Britannica Academic Edition*, *Letonika*, *LETA news archive*, *Nozare.lv*, *News.lv (Lursoft)*.

The e-books mentioned in the study programs are collected in the "[List of recommended study e-books](#)" section of the library's homepage - both purchased and from subscribed databases (such sections as "Dentistry", "Dental hygiene" etc. are available).

A section such as "Dentistry" etc. is available in the free access e-resources collected by the library staff.

Enclosed:

Annex 23.1. Assessment of the informative and methodological provision regarding library resources for the implementation of the study direction "Health Care" in accordance with the requirements of the guidelines

**3.3.2. Assessment of the study provision and scientific base support, including the resources provided within the framework of cooperation with other science institutes and higher education institutions (applicable to doctoral study programmes) (if applicable).**

Not applicable

**3.3.3. Indicate data on the available funding for the corresponding study programme, its funding sources and their use for the development of the study programme. Provide information on the costs per one student within this study programme, indicating the items included in the cost calculation and the percentage distribution of funding between the specified items. The minimum number of students in the study programme in order to ensure the profitability of the study programme (indicating separately the information on each language, type and form of the study programme implementation).**

StP is planned to be financed from private individuals, setting the study fee at 4,800 EUR per year of study, increasing it to 5,100 EUR in the following years, analyzing the demand limitations. The cost per 1 student in the academic year of the study program "Dental Hygienist" is EUR 4938. The number of students planned to be reached in two years of the study program is at least 39 students, with 21 students admitted in the first year of study, and 3 students on average dropping out in the second year of study. The study program does not have funding from the State budget, currently there are no additional funding sources available for financing the study program, therefore, relying on self-financing, the minimum number of students for it to be profitable would be 40 students. Currently, an average of 43 students are studying in the study program per academic year. After high inflation and in the conditions of a rapid increase in the prices of energy resources, the expenses of the study program exceeded the revenues, but in the long term the situation is stabilized with the revision of the study fees.

The funding is used for staff remuneration, attraction of visiting assistant professors, taxes, maintenance of IT infrastructure, purchase of equipment and devices, and study visit costs. In addition to the direct costs of implementation of lectures and classes, the StP must cover infrastructure maintenance costs (facilities, IT solutions) and other RSU common resources used in the StP (Student Services, Library, organisation of the study process, grant for the Student Union and other support and administrative functions).

StP is implemented by the RSU Faculty of Dentistry Academic School of Dental Hygiene until 31 January 2022 / later by the Department of Conservative Dentistry and Oral Health, Department of Oral and Maxillofacial Surgery, Faculty of Medicine Department of Psychosomatic Medicine and Psychotherapy, Statistical Unit, Department of Biology and Microbiology, Institute of Anatomy and Anthropology Department of Morphology, Department of Pathology, Department of Clinical Skills and Medical Technologies, Faculty of Public Health and Welfare Department of Sports and Nutrition, Faculty of Pharmacy Department of Pharmacology, and Language Centre. Remuneration of the academic staff in the first year of StP is planned to be approximately 63 thousand EUR.

Table 2. **Information on student costs**

<b>Name</b>	<b>Result with current tuition fee</b>	<b>Result with estimated tuition fees</b>
Average income per student, EUR	4 577	4 863
Average cost per student, EUR	4 871	4 938
Academic staff, %	53	53
Department resources, %	17	17
Other direct expenditure, %	4	4
Fixed costs, %	4	4
Overheads, %	22	22

### **3.4. Teaching Staff**

**3.4.1. Assessment of the compliance of the qualification of the teaching staff members (academic staff members, visiting professors, visiting associate professors, visiting docents, visiting lecturers, and visiting assistants) involved in the implementation of the study programme with the conditions for the implementation of the study programme and the provisions set out in the respective regulatory enactments. Provide information on how the qualification of the teaching staff members contributes to the achievement of the learning outcomes.**

Highly-qualified lecturers participate in the implementation of the study programme “Dental Hygiene” of the Faculty of Dentistry: RSU lecturers and specialists experienced in dental clinical placement. 43 employees are involved in the implementation of the study programme – RSU’s permanent lecturers (27 in total), invited teaching staff from clinical departments of the RSU Institute of Stomatology and private dental practices, as well as from other medical, economic sectors (16 in total). 5 of the 27 academic staff representatives are professors, 2 are associate professors, 6 assistant professors, 7 lecturers, 7 assistants (see Annex 24.7). Application and

selection procedure of the academic staff at RSU is regulated by the Regulations of Rīga Stradiņš University on Academic Staff Positions, ([Regulations on Academic Elections at Rīga Stradiņš University](#)) and Rīga Stradiņš University Process “Elections of Academic Staff.

Study courses are mainly provided by departments of the RSU Faculty of Dentistry: most of them are provided by the Department of Conservative Dentistry and Oral Health. Since 31 January 2022, the Dental Hygiene study programme is included in this department based on RSU Senate decision No. 2-1/11/2021 on closing of the Academic School of Dental Hygiene of 14.12.2021. Study courses are provided also by other RSU structural units: Department of Psychosomatic Medicine and Psychotherapy, Biology and Microbiology, Morphology, Pathology, Clinical Skills and Medicine, Pharmacology, Occupational and Environmental Medicine, Humanities, Sports and Nutrition, Language Centre, Statistical Unit, Library.

The composition of teaching staff in the study programme is mainly stable. Lecturers have both academic work experience and practical work experience in dentistry. In the reporting period, there have been small changes in permanent lecturers and invited teachers of StP “Dental Hygiene”. The changes are related to ensuring succession and interaction between generations, as well as individual invited lecturers are not satisfied with their remuneration.

To promote the achievement of the aim of the study programme and learning outcomes, lecturers with extensive academic, professional and administrative experience in dentistry are involved in **teaching of industry-specific study courses:**

- The study course “Preventive Dentistry” is taught by Professor Anda Brinkmane, who is the Head of the Department of Conservative Dentistry and Oral Health, President of the Latvian Dentists Association, long-term experience in the implementation of epidemiological research, as well as in the development of different educational programmes to promote oral health, in cooperation with Riga City Council, the Ministry of Health. Author of many international scientific articles.
- Study courses “Public Health Care in Dentistry I and II”, “Educational Work – Placement in the Promotion of Oral Health” are taught by Assoc.Prof./Assist.Prof. Egita Senakola, who has experience in the development of methodology for epidemiological research, as well as leading research in cooperation with the Centre for Disease Prevention and Control (CDPC). The lecturer is an author of many educational programmes in promoting oral health, in cooperation with the Ministry of Health and Riga City Council. The lecturer is also a member of the Council of European Chief Dental Officers. She is an author of many scientific publications in Latvia and internationally.
- The study course “Paediatric Dentistry” is taught by Assist. Prof. Ilze Maldupa, who has experience in the development of methodology for different research projects. She is employed as a researcher, participates in the development of projects and leads state-funded projects. Currently, she does post-doctoral scientific activity at RSU (topic – Introduction of non-invasive caries methods in treatment of childhood caries), visiting lecturer at the Southern University of Chile. Elected to the Latvian Council of Science as an expert. She is an author of many scientific publications in Latvia and internationally.
- The study course “Periodontology” is taught by Dr. Una Stāmere, who specialised in periodontology and is currently preparing for doctoral studies at RSU. The lecturer is the President of the Latvian Association of Periodontologists and does extensive educational work in postgraduate training in dentistry in the introduction of the new perio classification. For more than a year the lecturer has been leading a dental terminology glossary development working group. She has perfect understanding of the organisation of team work in dentistry, in particular in periodontology.
- Study courses “Research in Dentistry”, “Communication with Patients in Paediatric Dentistry”

are taught by Assistant Professor Līga Kroniņa, who has long-term work experience as a specialist in paediatric dentistry, as well as communication psychology. In 2017, the lecturer defended her doctoral thesis "Correlation of the Children's Dental Fear and Anxiety with Oral Health and Psychosocial Factors". The lecturer is an author of several scientific publications.

- The study course "Preventive Dentistry" is taught by Dr. Anete Sopule (Strēle). Immediately after graduation from dentistry studies she started working at RSU Faculty of Dentistry study programme as a lecturer. She has enthusiastically developed new study topics in early caries diagnosis and prevention in children and young people in Latvia. Since 2017, she has been participating in the development of evidence-based clinical guidelines and methodological materials as a representative of the RSU Institute of Stomatology, in cooperation with the Centre for Disease Prevention and Control, the Department of Welfare of Riga City Council and the Ministry of Health (ESF projects). Already during studies, Dr. A.Sopule (Strēle) was an active lecturer in the field of promotion of oral health attending pre-school institutions and elementary schools in Riga with lectures. She participated in the work of the "Childsmile Symposium 2018" in Scotland at the University of Glasgow to adapt this prevention programme in dentistry also in Latvia. Dr. A.Sopule (Strēle) is very knowledgeable in clinical work and full of enthusiasm in preventive work with children and young people. She is a co-author of several scientific theses and articles, she has experience in speaking at international congresses and seminars. She is currently on parental leave.
- Study courses: "Pedagogy", "Preventive Dentistry", "Educational Work – Placement in the Promotion of Oral Health II", "Gerostomatology" are taught by lecturer Anda Mironova (Bc,sc.sal., Mg.paed., cert. dental hygienist). At the same time, the lecturer is working at the Department of Paediatric Dentistry at the RSU Institute of Stomatology as a dental hygienist. The lecturer was also the President of the Latvian Association of Dental hygienists (1997-2007), participated in the work of the International Dental Hygienists Association and the European Dental Hygienists Association.
- Study courses "Periodontology", "Clinical Placement", "Periodontology – Preclinic and Clinic" are taught by Gunta Nimma (Dukse) (Mg.sc.sal., cert. dental hygienist). At the same time, the lecturer is working at the Department of Conservative Dentistry at the RSU Institute of Stomatology, she had experience in organising her own dental practice. The lecturer was also the President of the Latvian Association of Dental hygienists (2011-2015), graduated from the RSU CEG School of Junior Academics in 2022.

The experience and employment of the above-mentioned lecturers make it possible to realise many areas at the same time in professional study courses: academic knowledge, practical and administrative work experience, scientific research activity. All lecturers of industry-specific study courses also know latest news in dentistry internationally and provide students with a reflection of the current situation in the sector.

In the reporting period, visiting lecturers were involved in study courses from:

- University of Dundee (Scotland, UK), lecturer Daffyd Evans with cycles of visiting lectures and seminars in autumn semesters of 2017, 2018 and 2019 (in study courses "Paediatric Dentistry", "Public Health Care in Dentistry"). A lecture and seminar course is planned for 2023.
- University of Lisbon (Portugal), Prof. Sandra Graca with a course of visiting lecture for autumn semester 2019 (in courses of study "Gerostomatology", "Educational Work – Placement in the Promotion of Oral Health II").

During the reporting period, lecturers have engaged in the following higher education projects:

- The distance learning course "Current Best Practices" (5 ECTS) has been developed within

the framework of the project Nordplus since 2016 in cooperation with Turku UAS and Savonia UAS (Finland), Kaunas (Lithuania), Rīga Stradiņš universities. The course is implemented on the Moodle study platform of Savonia University in English (responsible coordinator – I.Apine). An average of 5-10 2<sup>nd</sup> year students participate in this course in the spring semester of each academic year. The highest number of students (17) was in spring 2020. In spring 2022, 5 2<sup>nd</sup> year Dental Hygiene students participated in the distance learning course, gaining a better understanding of prevention strategies in dentistry in different countries, as well as supplementing their knowledge of English.

- As part of the Nordplus Higher Education 2019, Nordic-Baltic-Oral Health NBOH/2019 project, in which the RSU FD Dental Hygiene study programme was the coordinating institution. Cooperation partners: Savonia and Turku University of Applied Sciences (Finland) and Lithuanian University of Health Sciences (Lithuania). Mini-lectures, training videos were developed within the project. There was an exchange of lecturers and students, including visiting lectures. Experience of international cooperation. Participants: lecturers of the study programme “Dental Hygiene” – L.Kroniņa, I.Apine.
- Within the project Nordplus Higher Education 2020, Nordic-Baltic-Oral Health NBOH/2020, a **multi-professional** course “Promotion of Health for Families” (5 ECTS) was developed, including health promotion in pregnant women, young mothers and infants up to the age of one year. On 14 February 2022, the international team of lecturers (11 lecturers of RSU, Savonia, Kaunas University, representing dental hygienists, midwives and nurses) started piloting of this project in the Moodle platform [savonia.fi](https://savonia.fi) with participation of two students from each programme, 24 students in total. The piloting results were discussed at a meeting in Riga, on 25-27 April 2022. The study programme “Dental Hygiene” of RSU FD is planning to include this courses as B course in ac.y. 2023/2024. Lecturers and students obtained experience by cooperating interdisciplinarily and internationally to promote family health, including oral health. Lecturers from the study programme "Development" E.Senakola, L.Kroniņa participated in the development of the course.
- Erasmus+ blended intensive programme for students of the Dental Hygiene study programme in 2021-2027. In autumn 2021, cooperation partners from dental hygiene study programmes of RSU, Savonia UAS, (Finland), UC Leuven-Limburg (Belgium) met repeatedly on the online platform (Teams) to create a programme for an intensive course in Riga in 2022. The title of the intensive course is “**Oral Hygienists in changing World**” (3 ECTS). It was created in joined Moodle/OpenEdu Platform (deployed in RSU e-environment). There were two online meetings before the course started. Participants were 2 lecturers from each university (6 in total), and 10 students from RSU, 6 students from UC Leuven-Limburg and 5 students from Savonia UAS. All these participants met in Riga on 16-20 May 2022. Overall, the number of participants including visiting lecturers was 29. Students evaluated this intensive course by completing the questionnaire. All activities of the event can be seen at [studijas.rsu.lv](https://studijas.rsu.lv)-Faculty of Dentistry, Erasmus project. Lecturers from the study programme “Dental Hygiene” E.Senakola, I.Apine, U.Stāmere, I.Maldupa participated in the development and implementation of the course. Lecturers and students gained a better understanding of the role of the dental hygienist’s profession in a changing world, also taking into account intercultural understanding and social media participation. Students gained experience working with specific tasks in a group, presenting their results, improving their English language skills.

Lecturers of the study programme regularly improve their qualifications both in courses organised by the RSU CEG (development of digital simulation scenarios, creation of interactive content in the e-learning environment, management of skills acquisition, training with interactive video content, etc.) and outside the RSU:

- postgraduate courses, distance learning courses organised by the Latvian Association of Dentists and the Latvian Association of Dental Hygienists.
- conferences and post-graduate distance learning programmes of the European Dental Hygienists Federation.
- International Prevention conferences in Riga (in 2017 and 2018) with visiting lecturers from the UK, Netherlands, Sweden, Chile.
- meetings of the Council of European Chief Dental Officers twice a year – Latvia's representative, head of the programme E.Senakola.
- international dentistry conferences, congresses, seminars. during the COVID-19 period – also remotely.

Lecturers are regularly invited to make more active use of the opportunities offered by e-studies and are informed of the opportunities to attend educational seminars organised by RSU CEG to strengthen e-studies usage skills. Information on the possibilities to master various IT tools is sent to lecturers actively and on a regular basis, the training is ensured by the RSU Information Technology Department. All lecturers are actively involved in mastering new skills to provide the content of the course in the e-environment more successfully. From 1 January 2017 to 1 October 2022, 29 lecturers of the study programme “Dental Hygiene” participated in continuing education activities of the Centre for Educational Growth attending more than 130 training activities of different content. The lecturers of the study programme “Dental Hygiene” spent 2700 academic hours on continuing education activities.

The experience of lecturers (both in professional practice, research, participation in research projects) enables them to provide students with current knowledge in dentistry, to share practical experience and examples, and students highly appreciate this, and to prepare the study courses in such a way to combine theory and clinical practice.

Enclosed:

Annex 24.7. Analysis of the Composition of Teaching Staff.

### **3.4.2. Analysis and assessment of the changes to the composition of the teaching staff over the reporting period and their impact on the study quality.**

Long-term **permanent** lecturers of StP are assoc.prof./assist.prof. E.Senakola, lecturer A.Mironova and lecturer G.Nimma (Dukse) – only 3 in total. However, taking into account that the study programme has been part of the Department of Conservative Dentistry and Oral Health since 31.01.2022, we can say that lecturers of this department prof. A.Brinkmane, assoc.prof. L.Neimane, assist.prof.: A.Mindere-Gūbele, I.Rence-Bambīte, L.Kroniņa, I.Maldupa are also long-term lecturers. The total number of permanent lecturers has increased to 8. There is long-term cooperation with the majority of invited lecturers of classes (for example, dental hygienists I. Apine and V.Šlika, prof. B.Rozentāle, Dr. A.Greitāne, Dr. V.Jankovskis and others). Long and successful cooperation as established with individual lecturers of other RSU departments (lecturer of the Department of Occupational and Environmental Medicine Dr. S.Grīnberga, assoc.prof. of the Joint Laboratory of Electron Microscopy of the Institute of Anatomy and Anthropology V.Groma, lecturer of the Department of Biology and Microbiology of the Faculty of Medicine Dr. D.Rostoka and others).

During the accreditation period the composition of teaching staff in the study programme was mainly stable. Lecturers have both academic work experience and practical work experience in

dentistry. In the reporting period, there have been small changes in permanent University lecturer and invited lecturers of StP "Dental Hygiene". The changes are related to ensuring succession and interaction between generations, health problems, child care leaves, as well as individual invited lecturers are not satisfied with their low remuneration. 2 to 4 lecturers per academic year are replaced on average.

Attracting new lecturers, facilitating the return of former lecturers and the professional and scientific activities of existing lecturers - the quality of training has considerably improved in the study courses in dentistry, because lecturers have improved their education/professional qualification, regularly participated in Nordplus and Erasmus mobility, worked in different international professional associations, attended many international conferences. They also actively participated in scientific research projects.

Benefits of individual study courses based on professional and scientific activities of new lecturers:

- Study courses "Periodontology – Preclinic and Clinic", "Periodontology". Dr. U.Stāmere has been involved in this study course since ac.y. 2018/2019, replacing Dr. I.Grīnvalde. U.Stāmere is a new specialist in Periodontology and the President of the Latvian Association of Periodontologists. In two years, the study course has been gradually transformed based on changes in the Classification of Periodontal and Peri-Implant Diseases and Conditions (2017 AAP/EFP). The lecturer is planning to study in a doctoral programme.
- Study courses "Paediatric Dentistry" and "Preventive Dentistry". prof. I.Maldupa, returned to the dental hygiene study process in ac.y. 2019/2020 after her traineeship abroad. Thanks to the initiative of the lecturers, New non-invasive treatments for early childhood caries have been taught since 2020. They are more efficient than the conventional treatment approach and cause distribution of less aerosols, thus reducing the risk of airborne infectious diseases. Elected to the Latvian Council of Science as an expert. She is an author of many scientific publications in Latvia and internationally.
- Study courses "Research in Dentistry", "Communication with Patients in Paediatric Dentistry" since 2016/2017 ac.y. are taught by Assistant Professor Līga Kroniņa, who has long-term work experience as a specialist in paediatric dentistry at RSU Institute of Stomatology, as well as communication psychology. In 2017, the lecturer defended her doctoral thesis "Correlation of the Children's Dental Fear and Anxiety with Oral Health and Psychosocial Factors". The lecturer is an author of several scientific publications.

The StP administration regularly and in a timely manner take measures so that changes in the composition of teachers in each academic year do not affect the quality of the study programme and the conformity of the study programme with the requirements of regulatory enactments.

**3.4.3. Information on the number of the scientific publications of the academic staff members, involved in the implementation of doctoral study programme, as published during the reporting period by listing the most significant publications published in Scopus or WoS CC indexed journals. As for the social sciences, humanitarian sciences, and the science of art, the scientific publications published in ERIH+ indexed journals or peer-reviewed monographs may be additionally specified. Information on the teaching staff included in the database of experts of the Latvian Council of Science in the relevant field of science (total number, name of the lecturer, field of science in which the teaching staff has the status of an expert and expiration date of the Latvian Council of Science expert) (if applicable).**



Not applicable

**3.4.4. Information on the participation of the academic staff, involved in the implementation of the doctoral study programme, in scientific projects as project managers or prime contractors/ subproject managers/ leading researchers by specifying the name of the relevant project, as well as the source and the amount of the funding. Provide information on the reporting period (if applicable).**

Not applicable

**3.4.5. Assessment of the cooperation between the teaching staff members by specifying the mechanisms used to promote the cooperation and ensure the interrelation between the study programme and study courses/ modules. Specify also the proportion of the number of the students and the teaching staff within the study programme (at the moment of the submission of the Self-Assessment Report).**

A mechanism for mutual cooperation between teaching staff-lecturers has been created within the Dental Hygiene study programme and within the Faculty of Dentistry and within the framework of other RSU departments:

1. within the study programme "Dental Hygiene" lecturers, who are involved in teaching professional dentistry study courses meet in Zoom or face-to-face meetings on a regular basis (at least 1-2 times per month) to discuss latest news in individual dentistry areas (Periodontology, Prevention of Dental Diseases, Paediatric Dentistry, Public Health Care in Dentistry). New aims are being set together for the acquisition of a new dental technology-method that can be used to train students in several study courses (ICDAS index – in 2019, ICON method in 2021). In spring 2022, a group of lecturers of the study programme participated in the development of the standard profession of dental hygienists (version 3). Lecturers regularly participate in the development of new projects and in the implementation of Nordplus projects (meeting in working groups). Cooperation has also developed with the RSU Department of Nursing and Obstetric Care within the framework of the **multi-professional study** course "Promotion of Health for Families" (2020-2022). Lecturers meet regularly at study programme meetings, sometimes representatives of students are also invited to meetings to discuss how to better implement individual student placements. In preclinical and clinical dental study courses, the teacher-student ratio is 1:8.
2. Since 31 January 2022, the "Dental Hygiene" study programme is included in the Department of Conservative Dentistry and Oral Health based on RSU Senate decision No. 2-1/11/2021 on closing of the Academic School of Dental Hygiene of 14.12.2021. Lecturers of the study programme "Dental Hygiene" also participate regularly in department meetings, in which an even wider range of dental study courses is represented, which opens possibilities for cooperation of the dental team in an even more integrated way (Dental Anatomy and Roentgenology, Cariology, Endodontics). The observation process also helps to share

experience and find new approaches and clinical methods that are further introduced in the training process for students (Changes in the Classification of Periodontal and Peri-Implant Diseases and Conditions 2017 AAP/EFP). Many lecturers of the department attend various international congresses, seminars, courses and report at department/study programme meetings. There are discussions, exchanges of ideas, ideas emerge, such as the introduction of new clinical methods in the student training process (since 2020, new non-invasive treatments for early childhood caries – silver diamine fluoride applications). Introduced in the study programme for both dentists and dental hygienists. Lecturers of the study programme “Dental Hygiene” pay great attention to strengthening collegiality.

3. The director of the study programme “Dental Hygiene” regularly participates in the meetings of heads of departments of the Faculty of Dentistry and in the meetings of the Faculty Council. Lecturers and also students are informed about latest news. Meetings with students from both study courses take place once a semester. Each course has a “group of active students” who participate in and support all activities organised by the study programme, such as voluntary participation in different oral health promotions events – campaigns “Fields enter cities” – 8 September 2018, “Gingival Health Week” – 7-12 May 2019, “Researchers’ Night at RSU” – autumn 2018, 2019, “World Oral Health Day” – 20 March 2022.

Ratio of the number of students and teachers in the study programme: 47 students and 43 teachers (information on students in Annex 16, on teachers in Annex 24.7). The ratio of the number of students and teachers is 1.1. Within the framework of the dental hygienist study programme a teacher shall be ensured in clinical and pre-clinical study courses: student ratio 1:8.

# Annexes

III - Description of the Study Programme - 3.1. Indicators Describing the Study Programme		
Sample of the diploma and its supplement to be issued for completing the study programme	24.1_pielik_Zobu Higienists_eng.pdf	24.1_pielik_Zobu_higienists_lv.pdf
For academic study programmes - Opinion of the Council of Higher Education in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions (if applicable)		
Compliance of the joint study programme with the provisions of the Law on Higher Education Institutions (table) (if applicable)		
Statistics on the students in the reporting period	16_pielik_Zobu_higienists_statistika_eng.pdf	16_pielik_Zobu_higienists_statistika_lv.pdf
III - Description of the Study Programme - 3.2. The Content of Studies and Implementation Thereof		
Compliance with the study programme with the State Education Standard	17.1_pielik_1LPSP_atbilstiba_izglitiba_standartam_ZobuHig_ENG.pdf	17.1_pielik_1LPSP_atbilstiba_izglitiba_standartam_ZobuHig.pdf
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard or the requirements for professional qualification (if applicable)	18.2_profesijas_standarta_kartejums_Zobu_Hig_ENG.pdf	18.2_pielik_Prof_standarta_kartejums_ZobuHig_lv.pdf
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)		
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	18.1_An_x_Mapping_st_courses_achiev_learn_outcomes_Dental_hig.pdf	18.1_St_kursu_StP_rezult_kartejums_ZobuHig_lv.pdf
The curriculum of the study programme (for each type and form of the implementation of the study programme)	19_pielik_StP_planojums_Zobu_higienists.pdf	19_pielik_StP_planojums_Zobu_higienists.pdf
Descriptions of the study courses/ modules	20_An_x_Study_course_description_Dental_Hygiene.pdf	20_pielik_Kursu_apr_Zobu_higienists.pdf
Description of the organisation of the internship of the students (if applicable)	09_An_x_Student_placement_Dental_Hygiene.pdf	9_pielik_Prakse_Zobu_Hig.pdf
III - Description of the Study Programme - 3.4. Teaching Staff		
Confirmation that the academic staff of the doctoral study programme includes not less than five doctors, of which at least three are experts approved by the Latvian Council of Science in the branch or sub-branch of science in which the study programme intends to award a scientific degree (if applicable)		
Confirmation that the academic staff of the academic study programme complies with the requirements specified in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions (if applicable)	24.7_An_x_Analysis_Academic_staff_Dental_hig.pdf	24.7_pielik_Docetaju_sastava-analize_1LPSP_Zobu_higiēnistis.pdf

# Physiotherapy (42722)

Study field	<i>Health Care</i>
ProcedureStudyProgram.Name	<i>Physiotherapy</i>
Education classification code	<i>42722</i>
Type of the study programme	<i>Professional bachelor study programme</i>
Name of the study programme director	<i>Māra</i>
Surname of the study programme director	<i>Kuļša</i>
E-mail of the study programme director	<i>Mara.Kulsa@rsu.lv</i>
Title of the study programme director	<i>Degree of a Medical Doctor</i>
Phone of the study programme director	
Goal of the study programme	<i>Promote the development of the rehabilitation system corresponding to the needs of national economy and to social needs in Latvia, providing it with qualified and competitive professionals, physiotherapists, by establishing professional studies in physiotherapy in compliance with the Professional Standard for Physiotherapist and the normative Regulation of the Republic of Latvia.</i>
Tasks of the study programme	<p><i>Provide professional studies in physiotherapy that are in accordance with the Professional Standard for Physiotherapist and the Regulations of the Cabinet of Ministers of the Republic of Latvia, applicable in practice, through the acquisition of in-depth knowledge in physiotherapy;</i></p> <p><i>Prepare students for creative, research and teaching work in the field;</i></p> <p><i>Promote the competitiveness of the programme graduates in the changing socio-economic conditions in the local and international labour market.</i></p>

Results of the study programme	<p><i>Upon completion of the professional Bachelor's study programme "Physiotherapy" the students obtain:</i></p> <ol style="list-style-type: none"> <li><i>1. Knowledge and understanding of the professional area adequate to the qualification of a physiotherapist, which correspond to the latest scientific developments in physiotherapy, health care and other related fields, and which allow them to think creatively, to understand regularities and to analyse without losing critical approach;</i></li> <li><i>2. A high level of skills in the profession of a physiotherapist that allow them to work creatively as a physiotherapist, conducting the patient/client physiotherapy examination, evaluation, treating, counselling, health promotion and disease prevention, using physiotherapy technologies, and which are aimed at the promotion, improvement, restoration and maintenance of the functional capacity of patients/clients in individuals or groups of individuals at different age groups;</i></li> <li><i>3. Basic and specialised knowledge of research methodology and physiotherapy in order to participate in research and related projects, to contribute to the development of the physiotherapy field and to carry out innovative activities in their profession;</i></li> <li><i>4. Basic knowledge to work at the interface between the different healthcare fields involved in rehabilitation, within the framework of the organisation and implementation of rehabilitation, both in a local and international context;</i></li> <li><i>5. The ability to undertake initiative, make decisions, take responsibility for their implementation and the results, critically evaluate and, where necessary, make changes in their professional activity as a physiotherapist;</i></li> <li><i>6. The ability to creatively tackle problems related to the improvement of the patient's functional abilities in complex and unpredictable situations, working with the patient/client and carrying out organisational responsibilities in their professional activity;</i></li> <li><i>7. The ability to organise own professional development and that of subordinates in the context of lifelong learning, integrating new knowledge and skills from different areas related to physiotherapy;</i></li> <li><i>8. The ability to work individually, as part of a team or managing the team work, demonstrating good communication skills with patients/clients, their relatives and colleagues, understanding and adhering to ethical standards;</i></li> <li><i>9. The ability to engage in business activities and to set up business.</i></li> </ol>
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Final examination upon the completion of the study programme	<i>Development and Defence of Bachelor's thesis</i>
	<i>National Examination</i>

## Study programme forms

### Full time studies - 4 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	<i>4</i>
Duration in month	<i>0</i>
Language	<i>latvian</i>
Amount (CP)	<i>160</i>
Admission requirements (in English)	<i>Secondary education</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	<i>Professional Bachelor's Degree in Health Care</i>
Qualification to be obtained (in english)	<i>Physiotherapist</i>

### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

### Part time studies - 5 years - latvian

Study type and form	<i>Part time studies</i>
Duration in full years	<i>5</i>
Duration in month	<i>0</i>
Language	<i>latvian</i>
Amount (CP)	<i>160</i>
Admission requirements (in English)	<i>Secondary education</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	<i>Professional Bachelor's Degree in Health Care</i>
Qualification to be obtained (in english)	<i>Physiotherapist</i>

### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

### 3.1. Indicators Describing the Study Programme

**3.1.1. Description and analysis of changes in the parameters of the study programme made since the issuance of the previous accreditation form of the study field or issuance of the study programme license, if the study programme is not included on the accreditation form of the study field, including changes planned within the evaluation procedure of the study field evaluation procedure.**

Table 1. Changes in StP parameters

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period	Planned changes within the assessment procedure
1.	Study direction	-	-
2.	Title of StP	-	-
3.	Code according to the Latvian Education Classification	-	-
4.	Head of StP	-	-
5.	Scientific degree of the Head of StP	-	-
6.	Aim of StP	-	-
7.	Tasks of StP	-	-
8.	Learning outcomes to be achieved	Editorial clarifications.	-
9.	Final examination upon the completion of StP	-	-
10.	Type and form of studies	-	-

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period	Planned changes within the assessment procedure
11.	Duration of implementation	-	-
12.	Language of implementation	-	-
13.	Volume of StP (CP)	-	-
14.	Admission requirements	The Objective Structured Clinical Examination (OSCE) was removed from the admission requirements.	-
15.	Degree to be awarded	-	-
16.	Qualification to be awarded	-	-
17.	Place of implementation	-	-

Table 1 shows that the changes in the StP parameters are in the admission requirements, and the Objective Structured Clinical Examination (OSCE) has been removed from them, because after evaluating the usefulness of the exam in RSU collegiate institutions, it was decided not to continue its implementation. Small editorial clarifications were also made in the study results of the study program, aligning them with the basic tasks of professional activity formulated in the standard of the physiotherapist profession. No other changes in the StP parameters have taken place since the previous study field accreditation sheet was issued and are not planned as part of the study field evaluation procedure. Study programs, incl. the compliance of their characterizing parameters with the professional standard was determined by mapping the study results of study programs and study courses and shows their mutual compliance. [Physiotherapist profession standard \(in Latvian only\)](#) (agreed on at the meeting of the tripartite cooperation sub-council of Professional education and employment on October 13, 2021, protocol No. 6).



**3.1.2. Analysis and assessment of the study programme compliance with the study field. Analysis of the interrelation between the code of the study programme, the degree, professional qualification/professional qualification requirements or the degree and professional qualification to be acquired, the aims, objectives, learning outcomes, and the admission requirements. Description of the duration and scope of the implementation of the study programme (including different options of the study programme implementation) and evaluation of its usefulness.**

The study programme “Physiotherapy” has been implemented at Rīga Stradiņš University since 1993. In academic years 1995/1996 and 1997/1998, with support of the Danish Government and in cooperation with the Copenhagen School of Physiotherapy in Denmark the study programme was improved in accordance with the recommendations of the European Region of *WCPT (World Confederation for Physical Therapy)* for physiotherapy education in Europe. The study programme has been accredited since 2000. In 2010, the implementation of part-time study programme “Physiotherapy” started. Since 2005, RSU with its study programme “Physiotherapy” has been represented at *ENPHE (European Network of Physiotherapy in Higher Education)*, whose mission is to improve physiotherapy education and make it more transparent, and to promote its uniform development in Europe. RSU is its active member.

The **aim** of the study programme is to promote the establishment of a rehabilitation system appropriate to the economic and social needs of Latvia by providing it with qualified and competitive specialists – physiotherapists, establishing professional studies in physiotherapy corresponding to the physiotherapist’s profession standard rooted in theoretical foundations of branch sciences and normative regulations of the Republic of Latvia.

The main **tasks** of the study programme are to ensure professional studies in physiotherapy corresponding to the profession [standard for a physiotherapist](#) (only in Latvian, 13.10.2021.) and CM Regulations of the Republic of Latvia and used in practice by learning in-depth knowledge in physiotherapy; to prepare students for creative research and teaching work in the field; to foster competitiveness of graduates of the programme in existing socioeconomic conditions in the domestic and international labour market.

The clarity of the set aim and tasks makes it possible to realise them and achieve them in life. The high competition per study place in the study programme, the willingness of graduates to continue with Master studies, the demand for graduates of the study programme in the labour market and positive feedback from employers indicate the relevance of the aim, tasks and learning outcomes.

The **learning outcomes** achieved by students in the study programme, make it possible to start professional activity in accordance with the tasks defined in the profession standard. Graduates have obtained knowledge, skills and competences corresponding to the qualification of a physiotherapist based on the latest scientific achievements, which allow the complete set of physiotherapy measures to be implemented, providing an appropriate and high-quality service in physiotherapy.

The study programme in the amount of 160 CP / 240 ECTS is implemented intramurally as a full-time (four years) and part-time (five years) programme. There is a strong demand for both types of implementation, as is pointed out by the high number of applications during admission.

Admission to the study programme takes place in accordance with admission regulations approved by the RSU Senate. Admission requirements provide for the possibility to commence studies in the study programme with acquired secondary education and mandatory CE assessment in Latvian

language, English language and Mathematics, as well as in Biology, which school graduates take in addition, and this facilitates the admission of knowledgeable and motivated students. Among students, especially in part-time intramural studies, there is a high share of students who combine work with studies and start to study some time after secondary education or choose to study already with higher education in another field.

The professional Bachelor's study programme in health care with qualification in physiotherapy has been created in accordance with Regulations of the Cabinet of Ministers (CM) No. 305 of the Republic of Latvia "Regulations on the National Standard of professional higher education" and its title clearly refers to the content of the programme and the qualifications to be obtained, in which professionals in one of the functional specialist professions relevant for rehabilitation are prepared. Code of the study programme (42722) conforms to Cabinet Regulation No. 322 "Regulations regarding Classification of Education of Latvia" and indicates the level of Education of the study programme (figures 42: Fifth level Professional qualification and Professional Bachelor's degree), as well as compliance with the direction of Health care (figures 722: thematic area - healthcare and programme group - medical services). The structure and content of the study programme allows implementation of the aims and tasks of the study programme, as well as achievement of the learning outcomes provided for in the study programme and preparation of graduates for the performance of such professional tasks, which are determined by the Physiotherapist's profession standard (agreed on 13.10.2021.). Recommendation documents and recommendations of professional associations (WCPT, WCPT ER, Latvian Association of Physiotherapists) and also ENPHE (*European Network of Physiotherapy in Higher Education*) for physiotherapy education are taken into account.

### **3.1.3. Economic and/ or social substantiation of the study programme, analysis of graduates' employment.**

The study programme "Physiotherapy" is implemented for state budget funds and for funds of private persons. Although the number of state-funded places in the study programme reduced in the previous accreditation period, the number of potential students and the number of enrolled students in the study programme has not reduced. This helps to develop the study programme in accordance with sector development needs. The Public Health Guidelines 2021-2027 set medical rehabilitation as one of priority health areas. They emphasise shortage of medical practitioners in the health care system, as well as insufficient availability of health care services – this is reflected in the specified development directions. The aim and tasks of study programme are closely related to the development of the rehabilitation sector.

Surveys of students, graduates and employers, which are organised on a regular basis, are a significant aspect in improving the study programme.

In academic year 2021/2022, a survey of the graduates, who have graduated since 2011, has been organised in cooperation with the Latvian Association of Physiotherapists (LAP). Its results show that most of the graduates (98%) work in a field related to the study programme. Overall, 84% respondents evaluate the study programme as good and very good. When asked of their assessment of their skills to apply knowledge and practical skills in the labour market, 70% responded with "good" and "very good," while 27% evaluated them as "average". Of those working in the sector, 92% consider the knowledge and skills acquired in the study programme useful, 96% of respondents noted that the education acquired had helped them find a job.

From academic year 2021/2022, 34% of full-time students and 56% of part-time students completed surveys for graduates. Overall, the choice of the study programme, its implementation, learning outcomes achieved are evaluated positively. Proposals of students for improvement of the study programme are reviewed in cooperation with the lecturers involved in the implementation of study courses, proposals regarding the improvement measures to be performed are reviewed during meetings of the Department of Rehabilitation and meetings of the StP Quality Council.

Under the guidance of the Dean of the Faculty of Rehabilitation, with the participation of the directors of study programmes, once every semester a meeting is held with the study programme course and group leaders of the Faculty of Rehabilitation in order to discuss topical issues related to studies.

Every year, the factors that have contributed to the selection of the study programme are determined when meeting first-year students. RSU participates annually in the exhibition "School", and students from the Faculty of Rehabilitation (FR), including the "Physiotherapy" study programme, are also its active participants. RSU organises Open Doors Days on a regular basis, where students and lectures in the "Physiotherapy" study programme are actively involved. The lecturers of the study programme, who work in clinics, participate in the Shadow Day. Lecturers and students of the study programme are also actively involved in the activities of the Academy of Young Medical Students. First-year students note that communication with physiotherapy professionals and physiotherapy students at these various events that has contributed to their choice of the study programme. Experience in communication with working physiotherapists is also a very important motivating factor during studies helping to overcome the difficulties associated with studies.

The results of student surveys upon completion of study courses are taken into account in the improvement of the study programme. Thus, for instance, the implementation of the study course "Biomechanics" was reviewed, and this study course of 1 CP / 1.5 ECTS was merged with the study course "Motor Control" of 3 CP / 4.5 CP to create a new study course "Fundamentals of Human Locomotion and Motor Control" of 4 CP / 6 ECTS. The number of practical classes was increased and a class in sports physiotherapy was added to the study courses "Sport Medicine" in accordance with students' recommendations. The planning of other professional study courses has also been revised, optimising the proportion of lectures and classes, so that even greater attention can be paid to the learning of skills and competences by students and to shift the acquisition of theoretical knowledge to self-studying to a greater extent. Following recommendations from employers, new topics have been introduced in study courses and more attention has been paid to some matters. For example, the topic of use of technical aids, as well as the topic of medical documentation in rehabilitation have been extended, the topic of new technologies in physiotherapy, the topic of unity of body and mind and its role in the physiotherapy process have been included, the development of an appropriate study course on unity of body and mind has started.

In 2020, the final report of a study conducted by *Dynamic University* on the competitiveness and compliance of RSU study programmes with labour market in the field and sector development trends pointed out that employers in the field of rehabilitation generally highly assess the qualifications and compliance of students and graduates with labour market requirements, and points out that young specialists, graduates are among the ways that can help employers implement and animate new approaches and methods.

It should be noted that Latvia still has a lower number of physiotherapists per capita compared to many other European Union (EU) countries, as well as the availability of physiotherapists varies across regions. In recent years, it has been placement in one of the regional medical treatment institutions that has made possible for graduates to find their future workplace.

During placement, employers also have the opportunity to address potential employees, and they use it actively. Funding for rehabilitation services, and therefore their supply is gradually growing, creating new jobs. Informal talks with employers, who are involved in the implementation of placement, participate in StP Quality Council, FR Council, provide information on plans to increase the number of physiotherapists in their medical treatment institutions – both in the state and private sectors – in the near future. It should be noted that the private sector in the field of physiotherapy is currently growing rapidly.

The need for physiotherapists in the labour market is also evidenced by the high number of job offers for graduates of the study programme, and most often these offers appear on the website of the Latvian Association of Physiotherapists (available in [Latvian](#) and [English](#)). Employers are aware of the possibility to publish their job offers on the LAP website and use it extensively.

#### **3.1.4. Statistical data on the students of the respective study programme, the dynamics of the number of the students, and the factors affecting the changes to the number of the students. The analysis shall be broken down into different study forms, types, and languages.**

24 state-funded study places in full-time studies are provided for admission to the study programme “Physiotherapy” and additional 36 study places for tuition fee are planned. Part-time studies are implemented only for student’s personal funds. The number of persons willing to study is constantly high both in the full-time and part time form of implementation. In the last three years, i.e. 516, 466 and 469 applications for full-time studies and 89, 90 and 99 applications for part-time studies were received in 2020, 2021 and 2022, respectively. The competition per study place is high and makes it possible to enrol for highly motivated students, who showed high results in centralized examinations in secondary education.

The number of students in full-time programme during the accreditation period was from 214 in academic year 2017/2018 to 236 in academic year 2019/2020. It has been almost unchanged in the last three years, 235 (academic year 2020/2021), 234 (academic year 2021/2022) and 230 (academic year 2022/2023). In the part-time study programme, the number of students increased from 83 students in academic year 2016/2017 to 107 students in academic year 2021/2022, and it has also increased in the last three years – 100, 107 and 117 students, respectively.

The demand for physiotherapy specialists in the labour market promotes the number of those who want to study. This demand has been constantly high over the years, because the number of physiotherapists in Latvia is still significantly behind the number of physiotherapists in other European countries, where physiotherapy education has longer traditions. In 2020, Norway had 2.5 physiotherapists per 1000 inhabitants, the Netherlands – 1.94, Belgium – 2.09, according to data provided by *The Global Economy*, but Latvia, in accordance with the data of the register of the Ministry of Health, as of 1 December 2022 had 1282 practicing physiotherapists, i.e. 0.68 per 1000 inhabitants. It is particularly important to increase the number of physiotherapists in Latvian regions.

Number of students in the first year of studies is higher. Student drop-outs start in the second year of studies, this is explained by student drop-outs in the first year of studies, which was from 30% to 13% (in academic year 2019/2020). In the third and fourth years of studies, changes in the number of students are small. The main reasons for academic leave are poor academic performance and withdrawal. Talks are conducted with each student, who decided to withdraw from studies, in which

students reveal that studies are often difficult to combine with work and family life. The study programme has a high share of working students and also students who choose to study when a longer period of time has passed after obtaining secondary education and a family has already been created. Many also note that studying in this programme is harder compared to other study experiences that have not been related to the health care sector.

Tracking of the dynamics of student counts shows that it has not been negatively impacted by the decline in state-funded study places and the situation relating to the COVID-19 pandemic.

Within the scope of the study programme students have the opportunity to participate in the *Erasmus+* student mobility programme by having clinical placement in cooperation universities outside Latvia. On the other hand, partner universities with Erasmus+ contracts are offered to send their students for placement with us. Students make extensive use of the opportunity to go to universities outside Latvia and increase their competence by studying in a different cultural environment. During the last accreditation period, 49 students used this choice, while 35 students came to RSU. The high number of cooperation agreements would allow even more students to be included in the *Erasmus+* exchange programme, but it should be noted that the COVID-19 pandemic has had a significant impact over the last three years. Moreover, the study programme has a large number of students who work in parallel with studies, have created a family and are not prepared to be outside Latvia for a longer period of time.

### **3.1.5. Substantiation of the development of the joint study programme and description and evaluation of the choice of partner universities, including information on the development and implementation of the joint study programme (if applicable).**

## **3.2. The Content of Studies and Implementation Thereof**

### **3.2.1. Analysis of the content of the study programme. Assessment of the interrelation between the information included in the study courses/ modules, the intended learning outcomes, the set aims and other indicators with the aims of the study course/ module and the aims and intended outcomes of the study programme. Assessment of the relevance of the content of the study courses/ modules and compliance with the needs of the relevant industry, labour market and with the trends in science on how and whether the content of the study courses/ modules is updated in line with the development trends of the relevant industry, labour market, and science.**

The aim of the study programme and the learning outcomes are closely related and the achievement thereof is ensured in conformity with the aim of the study programme and the results of study courses subordinate to the learning outcomes (Annex 18.1). The results of both study programmes and study courses conform to the standard of the profession of physiotherapist, which indicates the conformity of the study programme with labour market requirements and is reflected in the results of mapping (Annex 18.2). Study courses are planned in logical order and are updated

regularly before each academic year in accordance with RSU Quality management requirements and taking into account feedback from students and participating teaching staff.

The professional Bachelor's study programme "Physiotherapy" with a degree in health care and a physiotherapist's qualification to be obtained, is four-year full-time studies and five-year part-time studies. Each year of studies has two semesters, each semester closes with a session during which the knowledge, skills and competences acquired by students are examined. In accordance with CM Regulations No. 305 "Regulations on the National Standard for the Professional Higher Education" students should get 160 credit points / 240 ECTS during the study programme. Of this amount, 26 CPs / 39 ECTS can be received for clinical placement in the 4<sup>th</sup> year of studies. The amount of clinical placement is sufficient for starting professional activity in physiotherapy in accordance with the profession standard for a physiotherapist. The amount of placement is higher than the minimum set in CM Regulations, and this is vital to prepare students for independent professional activity.

12 CP / 18 ECTS are allocated to the national degree examination, incl. writing and defence of a Bachelor's thesis in the 4<sup>th</sup> (full-time) or 5<sup>th</sup> (part-time) year of studies, but other 122 CP/ 183 ECTS are allocated to general education, industry-specific theoretical, information technology, professional specialisation and elective study courses.

General educational study courses amount to a total of 20 CP/ 30 ECTS. They include theoretical courses in humanities and social sciences courses, which develop basic social, communicative and organisational skills.

Industry-specific theoretical basic courses and information technology courses amount to 36 CP / 54 ECTS. They include general basic courses in life sciences such as "Biology", "Anatomy", "Physiology", etc., which equalise the level of students' knowledge and provide comprehensive knowledge, skills and abilities, which are necessary for mastering professional specialisation courses.

Industry-specific professional specialisation courses amount to 60 CP / 90 ECTS. They provide students with in-depth knowledge for mastering the physiotherapist's profession, provide special knowledge, skills and competences in the profession, in accordance with the profession standard. These are pre-clinical study courses in the first two years of studies and clinical physiotherapy study courses, which are mainly implemented in the third year of studies (for example, "Physiotherapy in Orthopaedics", "Physiotherapy in Neurology", etc.).

Elective study courses of the Bachelor's study programme amount to 6 CP / 9 ECTS. Compulsory elective study courses are offered in the last year of studies, which provide students with the possibility to deepen their knowledge and skills in their area of interest in physiotherapy.

Study courses of the professional Bachelor's study programme are created and are constantly improved in accordance with the physiotherapist's profession standard in Latvia, as well as recommendations of the *WCPT* European Region and *ENPHE*. Mapping of the study programme has been performed in accordance with the new physiotherapist's profession standard, which has been in force since 13 October 2021. The learning outcomes have been clearly formulated for the study programme and for each study course. Those who want to study have access to study course descriptions of the study programme, which define the aim of the course, the necessary prerequisites, content, as well as test methods and outcomes of the study process – what knowledge, skills and competences are acquired by students as a result of learning the study courses. This information is available on the RSU website free of charge. Additional information for students regarding the content and expected outcomes of the study course, information regarding the topics of lectures, practical classes and seminars, a list of mandatory and recommended

readings and requirements for the mastering of the study course are offered in the study course description, which is available in e-learning.

In academic year 2016/2017, significant changes in the study programme affected the theoretical part of the national degree examination (NDE). The oral reply was replaced by a written test with multiple choice questions consisting of 100 test questions. All lecturers of professional study courses on physiotherapy were involved in the development of the test. After the NDE changed, students evaluated this positively in the survey. During the last accreditation period, there was a transition to electronic theoretical part of the NDE on the e-learning platform using the *Respondus* programme to ensure academic integrity. For two years, due to the COVID-19 epidemic, the practical part of the NDE also took place in the e-environment, using situational tasks in the development of which lecturers of professional study courses were involved. In academic year 2021/2022, we returned to the practical part of the NDE in a real clinical setting. Assessment criteria have been established for the evaluation of the practical part of the NDE, which allows for a uniform view for all members of the assessment commission. Questions of the theoretical part of the NDE and the situational tasks, when they were used, were regularly reviewed, analysing those questions where the highest number of errors were made. At least 20% of questions and situational tasks are changed each year.

The content of the study programme is regularly improved and the descriptions of study courses, the content of lectures and classes are reviewed every year, including the latest scientific data and updating the recommended readings for students. A new standard for the physiotherapist's profession has been introduced since 13 October 2021. Mapping of the study programme has been performed in accordance with the professional activity tasks and necessary competences of the physiotherapist defined in the standard.

Students choose topics for their Bachelor's thesis according to the chosen field of professional activity, the selected topics are up to date, the results obtained can be practically used and make their contribution to the field of rehabilitation. These include translations of instruments used in rehabilitation, including physiotherapy, literature reviews of therapy methods used in physiotherapy and their effectiveness, etc. The latest scientific literature is used in the selection and development of the topics, taking into account recent trends in the sector.

Since 2017, one student's Bachelor's thesis has participated in the annual student research paper competition organised by *ENPHE*. Students are offered the opportunity to present their best Bachelor's theses in the seminars of the Latvian Association of Physiotherapists.

Clinical placement is a mandatory part of the study programme, which is organised in accordance with the Latvian legal environment, and provides for improvement of the skills necessary for the acquisition of professional qualification in a company or organisation outside RSU corresponding to the sector. In the study programme "Physiotherapy", clinical placement is implemented in the 4<sup>th</sup> year of studies (semester 7 and 8) in the amount of 26 CP / 39 ECTS in the state leading clinics, rehabilitation centres and outpatient medical treatment institutions.

**3.2.2. In the case of master's and doctoral study programmes, specify and provide the justification as to whether the degrees are awarded in view of the developments and findings in the field of science or artistic creation. In the case of a doctoral study programme, provide a description of the main research roadmaps and the impact of the study programme on research and other education levels (if applicable).**

**3.2.3. Assessment of the study programme including the study course/ module implementation methods by indicating what the methods are, and how they contribute to the achievement of the learning outcomes of the study courses and the aims of the study programme. In the case of a joint study programme, or in case the study programme is implemented in a foreign language or in the form of distance learning, describe in detail the methods used to deliver such a study programme. Provide an explanation of how the student-centred principles are taken into account in the implementation of the study process.**

The amount of the study programme is 160 credit points / 240 ECTS. One credit point is the student's workload of 40 academic hours. The number of contact hours within one credit point is from 30% (in individual study courses in part-time studies) to 40% (in most study courses, incl. study courses in full-time studies and professional study courses in part-time studies). The remaining workload is the student's independent work. The description of each study course includes the organisation of independent work, tasks, and assessment criteria. The e-environment is used to communicate and inform students, submit independent work, provide feedback.

The study programme plan has been created in accordance with the strategy, aims and tasks of RSU.

The study programme is implemented by the RSU Dean's office of the Faculty of Rehabilitation, the Department of Rehabilitation (DR) and other RSU departments, inviting to the programme personnel from different state and private medical treatment institutions: hospitals, rehabilitation centres and outpatient medical treatment institutions. Studies take place in RSU classrooms and RSU clinical learning centres. Clinical placement is implemented in medical treatment institutions, and the number thereof has increased significantly during the accreditation period, including also based on gratuitous agreements.

An essential condition for the functioning of the study programme is the establishment of the programme management and quality assurance system. The quality assurance of the physiotherapy study programme is based on regular analysis and evaluation of the content of study subject programmes in structural units implementing the programme and at Council meetings of Faculty of Rehabilitation; analysis and control of the study process, which is performed regularly, analysing the content, quality of study subject programmes, results of student surveys and other indicators (for example, students' academic achievements); ensuring integration of the study process and research work; strategic planning of the study process by analysing strengths and weaknesses and development opportunities of study courses; cooperation with employers, cooperation with international other universities – members of *ENPHE*.

In academic year 2014/2015, the joint Study Quality Council of FR Bachelor's and Master's study programmes "Physiotherapy" started active work. It includes representatives of employers, the professional association including the Latvian Association of Physiotherapists Certification Commission, students, academic staff and study programme directors. In academic year 2022/2023, a separate Study Quality Council of the professional Bachelor's study programme "Physiotherapy" was established. The matters related to the study process are discussed in the Study Quality Council on a regular basis. One of the most significant matters examined in the Study Quality Council are changes in plans of the study programme before their annual approval at the Dean's Council. Thus, for instance, in academic year 2022/2023, the matters related to the planning of the study programme will be examined when switching to the European Credit Transfer System



(ECTS). Regular exchange of information on the results of the certification of the graduates of the study programme is ensured with the Latvian Association of Physiotherapists Certification Commission.

To ensure high-quality implementation of the study programme, the Department of Rehabilitation and other RSU departments also invite personnel from the professional environment – they are high-level professionals in their field. Studies take place in RSU classrooms and RSU clinical learning centres. The support of administrative and technical staff, taking into account the many bases where the study programme is implemented, is very important and highly appreciated. In academic year 2012/2013, a significant improvement was achieved by starting work in the new Medical Education Technology Centre, which is developing rapidly and where many of the study courses of the study programme are implemented, including pre-clinical professional study courses. Students are also offered the possibility to use physiotherapy lecture rooms for self-studies, including independent skills training.

Studies are intramural, and training uses a variety of training methods: lectures, practical classes, seminars, discussions, student's independent work (group projects, individual projects, individual research projects and presentation of prepared projects). RSU has introduced the e-learning environment and it is constantly being improved within the framework of the study programme. Rapid growth occurred during the COVID-19 pandemic. New study materials have been created to ensure remote studies, including video materials were filmed for ensuring the acquisition of practical skills, such as video demonstrations of manual therapy techniques, special examination tests, proprioceptive neuromuscular facilitations (PNF).

Most of the study programme is composed of practical classes during which professional skills are acquired. And this practical part is implemented by working in small groups, thus ensuring individual approach to students. Individual tutorials are provided, wishes and proposals of students are listened to and taken into account when needed. Students have the opportunity to use physiotherapy classrooms for independent development of practical skills, and physiotherapy students do this often.

The leading study methods in the acquisition of study programmes are systems approach, situation analysis and problem-oriented approach.

To obtain experience in problem-based learning (PBL), in cooperation with Tampere University of Applied Sciences (*TAMK*), lecturers of our study programme attended *TAMK* and familiarised themselves with this university's physiotherapy study programme, which has been fully created based on PBL, and the head of the *TAMK* physiotherapy study programme attended RSU and met with lecturers of our study programme and presented their experiences. In academic year 2015/2016, a lecturer from *TAMK* Hannele Anttila visited RSU as part of the *Erasmus+* programme and shared her experiences on problem-based training. The experience obtained and participation in trainings organised by the Centre for Educational Growth (CEG) enabled the introduction of this method in individual study courses. During the last accreditation period, the use of situational tasks in professional study courses, including pre-clinical study courses, which are particularly important for the development of the professional judgement of students, has been widely implemented and developed, as well as it allowed for a full study process in remote studies where the possibility of contact with patients in the clinical environment was limited.

In recent years, serious work has been carried out to improve planning and inspection of students' independent work.

The e-learning environment is constantly being improved, both from the point of view of content and structure. The trainings provided by the RSU CEG on the improvement of the e-learning

environment definitely promote this process, and are actively used by lecturers of the study programme.

The lecturers involved in the programme provide for the study process methodologically, develop methodological materials, as well as constantly work on methodological materials in electronic form, which would be available in the electronic system of the university. The number of video lectures, videos with demonstrations of practical skills and other lecturers has grown rapidly. Lecturers and supporting staff of the study programme improve their skills in the training courses organised by RSU on the use of the e-learning environment and e-resources, as well as other study courses related to the study process, which are organised by CEG in cooperation with the IT Department on a regular basis. A particularly rapid increase in the use of new technologies was necessary to ensure remote studies, and we managed to implement them successfully. During COVID-19, studies at RSU, including in the study programme "Physiotherapy", were not interrupted and were implemented in full. Academic staff uses all information and communication technologies available at RSU to communicate with students. These technologies also provide feedback and easy access for administrative and academic staff.

The basic forms of programme acquisition assessment are tests and exams. Other forms used are test work, colloquia, tests, practical demonstrations, and presentations of independent works. Cumulative assessments are introduced in study courses increasingly more, which make it possible to assess students and provide feedback during the entire semester. Theoretical knowledge, practical skills, attitude and ability to contact with patients, their relatives and colleagues are assessed. Assessment system is being analysed and improved on a regular basis. Opinions of lecturers and students are taken into consideration.

A national degree examination (NDE) consists of a test of theoretical knowledge (test with multiple choice questions) and demonstrations of practical skills (with a patient in the clinical environment) with a total assessment, where the practical part has the biggest share (60%). Access to patients in the clinical environment was limited during the COVID-19 pandemic, the practical part of the NDE took place in the e-environment. The procedure of the NDE is described in the Procedure of the National Degree Examination which has been coordinated at the meeting of the Quality Council of the study programme, the Council meeting of the Faculty of Rehabilitation and approved by the RSU Council of Deans.

The national degree examination is assessed by the National Examination Board, the head and composition of which for the relevant academic year is approved and it works in accordance with regulatory documents of RSU. Representatives of employers and professional associations are involved in the National Examination Board and represent more than 50% of the Board. The chairperson of the National Examination Board is a representative of the employers or a professional association.

The high motivation of students to learn, which can be seen during the study process, especially when performing independent projects, should be noted, as well as is reflected in surveys of students and discussions with them. The high demand in the labour market for physiotherapy specialists also contributes to motivation.

During the study process, students get regular tutorials, they also take place before examinations, as well as when writing course papers and Bachelor's theses. When learning study subjects, students have access to the methodological materials prepared by lecturers in the e-environment, which stimulate the independent work of students.

**3.2.4. If the study programme envisages an internship, describe the internship opportunities offered to students, provision and work organization, including whether the higher education institution/ college helps students to find an internship place. If the study programme is implemented in a foreign language, provide information on how internship opportunities are provided in a foreign language, including for foreign students. To provide analysis and evaluation of the connection of the tasks set for students during the internship included in the study programme with the learning outcomes of the study programme (if applicable).**

Clinical placement is a mandatory part of the study programme, which is organised in accordance with the Latvian legal environment, and provides for improvement of the skills necessary for the acquisition of professional qualification in a company or organisation outside RSU corresponding to the sector. In the study programme “Physiotherapy”, clinical placement is implemented in the 4<sup>th</sup> year of studies (semester 7 and 8) in the amount of 26 CP / 39 ECTS in the state leading clinics, rehabilitation centres and outpatient medical treatment institutions.

The **aim of clinical placement** is to strengthen student’s knowledge acquired previously in the study programme, develop and improve practical skills in working with patients from different age groups and with different pathologies in prevention or reduction of functional capacity disorders and acquire competence conforming to the physiotherapist’s profession standard in the selected profession.

Placement sites are provided to students in all the leading and largest medical treatment institutions in the country (agreements were concluded with them): Pauls Stradins Clinical University Hospital, Riga East Clinical University Hospital, Children’s Clinical University Hospital, Hospital of Traumatology and Orthopaedics, Riga 2<sup>nd</sup> Hospital, NRC “Vaivari”, “Sanare”, KRC “Jaunkēmeri”, Riga Health Centre, etc. Agreements were also concluded with regional medical treatment institutions and cooperation with them is extended. Students have the possibility to have one part of placement of 5 CP / 7.5 ECTS in a medical treatment institution of their choice, if it meets the requirements defined in the placement regulations. A gratuitous agreement is concluded with it. Thus, more placement opportunities in regions and a potential opportunity to get a job in the future are provided. Each student has placement in five different placement sites working with children, adults and elderly people with different diseases: orthopaedic, neurological, cardiological, pulmonological, surgical, as well as for patients with injuries.

The organisation of clinical placement takes place in accordance with the placement documents: Clinical Placement Regulations, Clinical Placement Programme, Clinical Placement Portfolio, Clinical Placement Physiotherapy Protocol, Clinical Placement Stage Assessment. Students are familiarised with these documents before they start placement and they are freely available to students in the e-environment. Placement is controlled during the entire placement period. In academic year 2015/2016, the Clinical Placement Regulations of the study programme was improved before the placement site procurement procedure and is now common to all study programmes of functional specialists of the Faculty of Rehabilitation. A Clinical Placement Programme of the study programme, including a Clinical Placement Programme of the study programme “Physiotherapy”, has been created and implemented separately for each programme. The Clinical Placement Programme is reviewed and, if necessary, updated every academic year.

Students’ knowledge and skills are assessed throughout their placement, and the placement supervisor provides a written assessment of the placement stage at each placement site and provides feedback. Placement documentation is completed during placement. The placement

supervisor regularly monitors the completion of the Clinical Placement Logbook, reads the Physiotherapy Protocols and comments on their improvement. During placement, students report on placement after the autumn semester, but at the end of placement, during the spring semester, there is pre-defence, during which students should present to the commission placement documentation and provide their assessment of placement and self-growth.

At the end of the third year of studies, the director of the study programme organises a meeting with students and informs regarding the organisation, progress and content of placement in the fourth year of studies. Meetings are also organised before the beginning of placement itself at the beginning of the fourth year of studies, as well as during placement to discuss the topical issues related to placement. Meetings with clinical placement supervisors take place at least twice during an academic year. All current information related to placement is available to students and placement supervisors in e-learning.

### **3.2.5. Evaluation and description of the promotion opportunities and the promotion process provided to the students of the doctoral study programme (if applicable).**

### **3.2.6. Analysis and assessment of the topics of the final theses of the students, their relevance in the respective field, including the labour market, and the marks of the final theses.**

During studies, each student writes three course papers and a Bachelor's thesis. Course papers are written within specific study courses, and those are "Ergonomics", "Physiotherapy in Orthopaedics" and "Physiotherapy in Neurology". The topics of developed Bachelor's theses are up-to-date and in line with development trends and news in the sector. Students choose topics of Bachelor's theses according to the professional area they are interested in. The choice, formulation of topics and the creation of an application for a topic take place in cooperation with the lecturer supervising the Bachelor's thesis. Two meetings with students with participation of Bachelor's thesis supervisors are organised, when the Bachelor's thesis is developed. Those are the presentation and the defence of the topic of their Bachelor's thesis, and pre-defence of the Bachelor's thesis, during which students receive recommendations for improving their papers.

The results obtained while writing a Bachelor's thesis can be practically used and make their contribution to the field of rehabilitation. These include translations of instruments used in rehabilitation, including physiotherapy, literature reviews of therapy methods used in physiotherapy and their effectiveness, etc. The latest scientific literature is used in the selection and development of the topics, taking into account recent trends in the sector. Thus, for instance, in the last two academic years, i.e. in academic year 2021/22 and academic year 2020/21, the Bachelor's theses "The methods used by physiotherapists and their experience using them when working with subacute COVID-19 patients" and "Use of telerehabilitation in physiotherapist practice with patients" are closely related to the current situation due to COVID-19. The Bachelor's thesis "Stroke patient experience using digital rehabilitation therapy "Vigo" third version" and the Bachelor's thesis "Changes in the functional condition of the shoulder girdle and trunk for gym visitors after the use of VERVE classes" are research related to the professional area, in which instruments

created in a professional environment are used, while the Bachelor's thesis "Effectiveness of using robotic technologies to improve gait in children with cerebral palsy under 16 years of age, with GMFCS level II and III: a systematic review" and the Bachelor's thesis "The effectiveness of virtual reality in improving balance and gait in patients with Parkinson's disease: a systematic review" cover innovative, current topics important in the professional field, but the Bachelor's thesis "Analysis of leg and back muscle tension frequencies depending on the standing surface" was drafted within a larger project implemented by RSU.

The main directions of research related to the qualification "physiotherapist" of the professional Bachelor's study programme in health care are: evaluation of functional condition and physiotherapy for musculoskeletal system injuries, including gait analysis, evaluation of functional condition; physiotherapy for peripheral and central nervous system damages, motor control and its development; physiotherapy in paediatrics; the role of physiotherapy in preventing diseases and promoting health.

The assessments of Bachelor's theses given by the Bachelor's thesis defence board, where more than half are invited representatives of employers and the professional sector, including professional associations, are fairly high and do not differ significantly year by year. Thus, for example, in academic year 2021/2022, the average assessment was:

- full-time studies – 7.57;
- part-time studies – 7.89.

In academic year 2020/2021, the average assessment was:

- full-time studies – 7.49;
- part-time studies – 6.6.

During the accreditation period, all students had a positive assessment and every year 1 to 3 papers have been assessed as "excellent".

The research of the academic staff is related to the courses they read. All the lecturers of professional study courses on physiotherapy in StP "Physiotherapy" supervise scientific work of students and participate in reviewing of Bachelor's theses.

### **3.3. Resources and Provision of the Study Programme**

**3.3.1. Assessment of the compliance of the resources and provision (study provision, scientific support (if applicable), informative provision (including libraries), material and technical provision, and financial provision) with the conditions for the implementation of the study programme and the learning outcomes to be achieved by providing the respective examples.**

In the implementation of the study programme, all available resources of RSU are used as needed at departments where study courses of the study programme are learned.

Material and technical resources of the study programme, which are necessary for mastering professional study courses, are available at the RSU Medical Education Technology Centre (METC), which houses the Department of Rehabilitation and has the rooms necessary for learning the study

courses implemented by it with respective equipment necessary for learning basic physiotherapy skills both for the acquisition of basic physiotherapy skills (for example, physiotherapy beds, mats, balls, rubber, balance pads, etc.) and equipment which may be used for research purposes (e.g. balance platform, gait analysis equipment, equipment for isometric testing of muscle strength, etc.). The situation changed significantly in 2013, when METC was established and three rooms were set up with physiotherapy beds and other equipment needed to implement professional physiotherapy study courses. If necessary, two additional equipped rooms are used, which also provide physiotherapy beds and other equipment. Two gyms and a gymnastics hall are also used in METC for the study programme.

A register of available resources (equipment) has been created at the Department of Rehabilitation, allowing more efficient use of existing equipment and cooperation within the framework of study programmes of the Faculty of Rehabilitation and study courses implemented by the Department of Rehabilitation.

Every year, the budget of the Department of Rehabilitation allocates funds to restore and complement the resources needed for the study process. Heads of study courses present their proposals, which are taken into account when planning the budget. For example, equipment for learning physical therapy at pre-clinical stage was purchased. Proposals are also being made for the necessary new information resources that would be available in the RSU Library.

The budget of the Faculty of Rehabilitation allocates funds to attract visiting lecturers, support study visits and support research, and this possibility should be used more widely in the future.

Students in the study programme have access to extensive resources at the RSU Library and this is essential to ensure a full study process, including the possibility to use up-to-date scientific information when writing a Bachelor's thesis.

The availability of e-resources in all structural units of the library is the same, and most of the latest book collection on rehabilitation is located in the library branch at METC, where most study courses, including the professional ones, of the study programme, are implemented.

Four databases of e-books (*Ebook Academic Collection (EBSCO)*, *Ebook Central (Proquest)*, *AccessMedicine* and *ClinicalKey*) and ten full-text databases of journals are available in the field of rehabilitation sciences. The full texts of scientific articles in rehabilitation are available in subscribed databases: *Sage Premier 2022 Collection*, *Health Research Premium Collection (ProQuest)*, *MEDLINE Complete (EBSCO)*, *Communication Source (EBSCO)*, *Sociology Source Ultimate (EBSCO)*, *Academic Search Complete (EBSCO)*, *Wiley Online Journals*, *PsycARTICLES (APA)*, *BMJ Journals*, *ClinicalKey journals (Elsevier)*, *Science Direct (Elsevier)*. Four evidence-based medical databases are also available: *ClinicalKey Clinical Overviews (Elsevier)*, *The Cochrane Library (Wiley)*, *DynaMed (EBSCO)*, *PEN: Practice-based Evidence in Nutrition*.

A list of recommended e-books in the necessary areas such as rehabilitation and physiotherapy, massage, as well as in areas that include basic study courses and clinical study courses is provided to physiotherapy students.

The lecturers involved in the implementation of study courses participate in seminars organised by the RSU Library and become acquainted with the novelties in its supply. Library staff regularly inform them electronically about newly acquired resources, including trial databases, and ask them to provide their opinion on the need to purchase them.

During the accreditation period, especially during the COVID-19 pandemic restrictions, the e-learning environment – the skill of both students and lecturers to manage certain programmes (*Zoom*, *MS Teams*, *Google*, etc.) – developed rapidly. Training and technological support in

organising the study process and final examination organised by colleagues of the Centre for Educational Growth and the RSU IT Department contributed greatly.

**3.3.2. Assessment of the study provision and scientific base support, including the resources provided within the framework of cooperation with other science institutes and higher education institutions (applicable to doctoral study programmes) (if applicable).**

**3.3.3. Indicate data on the available funding for the corresponding study programme, its funding sources and their use for the development of the study programme. Provide information on the costs per one student within this study programme, indicating the items included in the cost calculation and the percentage distribution of funding between the specified items. The minimum number of students in the study programme in order to ensure the profitability of the study programme (indicating separately the information on each language, type and form of the study programme implementation).**

It is planned to finance the full-time study programme from the state budget and the funds of private and legal persons by setting the tuition fee in accordance with the state budget funding without social security in the amount of EUR 4890 of study year. Discounts on tuition fees are possible in accordance with internal regulatory documents. The number of students planned to reach in the four years of study of the full-time study programme is 223 students, with 62 students admitted in the first year of studies, and 3-7 student drop-outs in the following years. After high inflation and rapid increase in energy prices, the result of the full-time study programme with such tuition fee per year is negative due to the lack of funding from the state budget in accordance with the Cabinet Regulations No. 994 – the basic costs of studies no longer cover infrastructure maintenance costs. Information on the additional funding allocated for the performance funding, approved in the budget of the Ministry of Education and Science, will be available on 2<sup>nd</sup> half of 2023.

Part-time study programmes are planned to be financed by private individuals and legal entities. It is planned to reach a total of 86 students in the StP of five years, with 29 students enrolled in the first year of studies, 12 student drop-outs scheduled for the second year of studies, the third student drop-out rate falling to 14, and another student remaining unchanged in the fourth. The tuition fee for the StP amounts to EUR 3000 per year, increasing it to EUR 3100 in the coming years, analysing the restrictions on the demand. After high inflation and rapid increase in energy prices, expenses of the study programme exceeded revenues, but in the long run the situation is stabilised with the revision of tuition fees.

The funding is used for staff remuneration, attraction of visiting lecturers, taxes, maintenance of IT infrastructure, purchase of equipment and facilities and expenditure on study visits. In addition to the direct costs of delivering lectures and conducting classes, the study programmes have to cover infrastructure maintenance costs (premises, IT solutions) and costs of other RSU common resources used in the study programmes. (Student services, Library, organisation of the study process, grant to the Student Union and other support and administrative functions).

The study programme is implemented by the Department of Rehabilitation of the Faculty of

Rehabilitation, Department of Welfare and Social Work of the Faculty of Public Health and Social Welfare, Department of Public Health and Epidemiology, Department of Sports and Nutrition, as well as Department of Health Psychology and Paedagogy, Department of Anaesthesiology and Intensive Care of the Faculty of Medicine, Department of Occupational and Environmental Medicine, Department of Biology and Microbiology, Department of Human Physiology and Biochemistry, Department of Dermatology and Venereology, Department of Obstetrics and Gynaecology, Department of Internal Diseases, Department of Infectology, Department of Surgery, Department of Neurology and Neurosurgery, Department of Orthopaedics, Department of Pathology, Department of Paediatrics, Department of Psychiatry and Narcology, Department of Psychosomatic Medicine and Psychotherapy, Department of Radiology, Statistics Unit, Department of Clinical Skills and Medical Technology and Department of Morphology, Department of Pharmacology of the Faculty of Pharmacy and Language Centre. Remuneration of academic staff for the first year of full-time study programme is planned at approximately EUR 157 000, for the part-time study programme at approximately EUR 54 000.

*Table 2. Cost of the Full-Time Study Programme*

<b>Title</b>	<b>Outcome with the existing tuition fee</b>	<b>Outcome with the expected tuition fee</b>
Average revenue per student, EUR	4 595	4 744
Average cost per student, EUR	5 229	5 292
Academic staff, %	49	48
Resources of departments, %	3	3
Other direct expenditure, %	1	1
Students' clinical training and placement costs, %	2	2
Scholarship costs, %	3	3
Ongoing costs, %	5	5
Overhead costs, %	37	38

*Table 3. Cost of the Part-Time Study Programme*

<b>Title</b>	<b>Outcome with the existing tuition fee</b>	<b>Outcome with the expected tuition fee</b>
Average revenue per student, EUR	2 941	3 039
Average cost per student, EUR	2 983	3 013
Academic staff, %	61	60



Resources of departments, %	4	4
Other direct expenditure, %	3	3
Students' clinical training and placement costs, %	2	2
Scholarship costs, %	30	31

### 3.4. Teaching Staff

**3.4.1. Assessment of the compliance of the qualification of the teaching staff members (academic staff members, visiting professors, visiting associate professors, visiting docents, visiting lecturers, and visiting assistants) involved in the implementation of the study programme with the conditions for the implementation of the study programme and the provisions set out in the respective regulatory enactments. Provide information on how the qualification of the teaching staff members contributes to the achievement of the learning outcomes.**

The qualification of academic staff involved in the implementation of the study programme corresponds to regulatory documents of the Republic of Latvia. The director of the study programme "Physiotherapy" has education of a physician and a physiotherapist, she constantly improves her professional and pedagogical qualification. The teaching staff involved in the study programme are professors, associate professors, assistant professors, lecturers of RSU departments and assistants from 25 RSU structural units. The teaching staff involved in teaching professional physiotherapy study courses are highly qualified professionals in their area, obtained in-depth knowledge and skills in a physiotherapy field, actively participate in the work of the Latvian Association of Physiotherapists and the Europe region World Physiotherapy (*World Physiotherapy ER*) (Dace Stirāne, Evita Kiukucāne, Līva Tiesnese, Marika Briede, Mareks Osovskis, etc.). One representative of the study programme participates regularly in *ENNPHE (European Network of Physiotherapy in Higher Education)* seminars and conferences, is a representative of the state in this organisation. Three lecturers participated in the last congress of *World Physiotherapy ER* devoted to education in 2020.

Lecturers of the study programme are involved in the implementation of projects implemented by RSU.

In academic year 2018/2019, four lecturers of the study programme participated as content creators in the Baltic *Nordplus* project "Age is No Barrier", within which healthy ageing programmes were created.

In cooperation with *Arcada University of Applied Sciences* (Finland) a seminar for lecturers on the use of simulations in education of functional specialists was organised in summer 2022 in Riga, before that representatives of study programmes of the Faculty of Public Health and Social Welfare and the Faculty of Rehabilitation met and drew up cooperation plans in 2017 and 2019 in Riga and in 2018 in Helsinki. One of cooperation points that is of interest to both parties and is important also

in the development of StP “Physiotherapy”, includes exchange of experience on the simulated patient, the simulation scenario and development and integration into the study process of other materials related to simulations in health care.

Clinical placement supervisors entitled to train are physiotherapists certified by the Latvian Association of Physiotherapists with a Master’s degree in health care or five years of professional experience.

The study programme offers lecturers and classes of visiting lecturers. For example, in academic year 2021/2022, students of StP “Physiotherapy” listened to lectures on manual therapy topics by professor Luis Ceballos-Laita from the International University of Catalonia, it is planned to invite him as a visiting lecturer in academic year 2022/2023. Seminars *Individualized rehabilitation: Embodying the movement* organised by professor Wolfgang Schollhorn together with colleagues of the Lithuanian University of Health Sciences within the project funded by the Baltic-German University Liaison Office in academic year 2020/2021 can be mentioned as an example of international cooperation.

In academic year 2022/2023, the involvement in the implementation of the study programme of professor of physiotherapy at Springfield College Julia Chevan, Fulbright scholarship recipient, is planned.

From 1 January 2017 to 1 October 2022, 101 lecturers of the StP “Physiotherapy” participated in continuing education activities of the Centre for Educational Growth attending a total of more than 190 training activities of different content. The lecturers of the study programme “Physiotherapy” spent 8481 academic hours on mastering continuing education activities.

The lecturers participated in the following activities:

- Creation of animated visual studio materials;
- Reference management tool *EndNote*;
- Remote work of student groups with the *Miro* tool;
- Open access to scientific information;
- *Collaboration and Partnership Towards Professional and Sectoral Development: Local, National, Transnational*;
- *Contextualizing the use of Webinar in Higher Education*;
- *Creating Engaging and Interactive Classrooms through Active Learning Techniques*;
- The *PubMed* database and its tools for searching for scientific publications;
- Digital nuisances – changes and innovations encouraging organisations to change;
- Teaching in intercultural environments;
- Think tank: How to assess to learn?;
- Think tank: Feedback as a sources of cognition and possibility to improve oneself;
- Creation of electronic tests;
- *EndNote* tool for management of references online;
- Drafting of interactive study materials (*H5P*);
- Interactive presentations and real-time feedback in the *Mentimeter* tool;
- Potential of immersive technologies for efficient learning strategies;
- Improvisation in pedagogical activities;
- How games activate teaching and learning;
- How to promote the acquisition of transversal skills relevant to the working environment in the study process;
- How to create effective image and text compositions in teaching materials;
- Potential of conflict for building cooperation;
- Research methodology and statistical processing of data;

- Mediation – wilful and responsible conflict resolution culture at a university;
- Visualization of content in presentations;
- Development of a study course. Formulation and evaluation of learning outcomes;
- Technology-enriched study process;
- *Turnitin*: How to assess students' papers more qualitatively and effectively?;
- Creating videos: complex in a simple and short way.

The lecturers then implement the acquired knowledge in their work with students, creating engaging presentations, introducing newly learned technologies and methods in the learning process, and also understand better the student's needs and point of view.

When summarising information on the lecturers, who are RSU graduates, it has been concluded that 60 lecturers graduated from an RSU study programme (from one up to four), but 14 lecturers study in one of the programmes right now (in academic year 2022/2023).

#### **3.4.2. Analysis and assessment of the changes to the composition of the teaching staff over the reporting period and their impact on the study quality.**

During the accreditation period, two lecturers, who were involved in the implementation of professional study courses in the study programme, stopped working at the Department of Rehabilitation. Three lecturers, who completed doctoral studies at RSU and defended their doctoral theses in 2022/23, were involved in the implementation of professional study courses and are ready to make their contribution to the development of the study programme. New lecturers were involved, who continue with doctoral studies after obtaining a Master's degree or are planning to start them, and who are highly qualified professionals in their field. In this way Līga Savicka was involved in the implementation of the study course "Assessment and Classification of Functional Capacity", Didzis Rozenbergs – study course "Introduction to Professional Studies and Research", Ņikita Horoševs – study course "Functional Assessment and Treatment in Physiotherapy II". All these lecturers are graduates of RSU Bachelor's and Master's study programme. Gradual involvement of new colleagues makes it possible to ensure succession in the implementation of the study programme. Representatives of the professional environment are involved in the implementation of the study programme as invited lecturers. For example, Marika Briede, Līva Tiesnese participate in the study course "Functional Assessment and Treatment in Physiotherapy II", as they are knowledgeable and experienced professionals in areas like the use of elastic bandage equipment in physiotherapy (Marika Briede) and the body-mind unity concept (Līva Tiesnese). A representative of the Anti-Doping Bureau of Latvia (Ivans Šapošņikovs) is involved in the study course "Sport Medicine" as a visiting lecturer.

#### **3.4.3. Information on the number of the scientific publications of the academic staff members, involved in the implementation of doctoral study programme, as published during the reporting period by listing the most significant publications published in Scopus or WoS CC indexed journals. As for the social sciences, humanitarian sciences, and the science of art, the scientific publications published in ERIH+ indexed journals or peer-reviewed monographs may be additionally specified. Information on the teaching staff included in the database of experts of the Latvian Council of Science in the relevant field of science (total number, name of the lecturer, field of science in which the teaching staff**

**has the status of an expert and expiration date of the Latvian Council of Science expert) (if applicable).**

**3.4.4. Information on the participation of the academic staff, involved in the implementation of the doctoral study programme, in scientific projects as project managers or prime contractors/ subproject managers/ leading researchers by specifying the name of the relevant project, as well as the source and the amount of the funding. Provide information on the reporting period (if applicable).**

**3.4.5. Assessment of the cooperation between the teaching staff members by specifying the mechanisms used to promote the cooperation and ensure the interrelation between the study programme and study courses/ modules. Specify also the proportion of the number of the students and the teaching staff within the study programme (at the moment of the submission of the Self-Assessment Report).**

To ensure qualitative implementation of the study programme, significant cooperation between the lecturers involved in the implementation of study courses is ensured by various measures implemented within the structural unit, the Department of Rehabilitation, the Faculty of Rehabilitation, as well as in the implementation of study courses – in accordance with RSU quality assurance processes and also informally. Representatives of the study programme are involved in the work of the Council of the Faculty of Rehabilitation, the Study Programme Quality Council and inform lecturers of the study programme on decisions made there.

Prior to the beginning of each semester, the lecturers involved in the implementation of the study course, guided by heads of study courses, examine the planning of the study course and the topical issues related to its implementation. To ensure the interconnection and continuity of study courses, the director of the study programme organises meetings with heads of study courses. After the entry into force of the new standard for the physiotherapist's profession, the director of the study programme showed it to heads of study courses and the current tasks were discussed. Work has started and continues on reducing study courses with low credit points in the study programme. There is close cooperation with participation of the lecturers involved. Thus, for example, a new study course has been created instead of the study course "Public Health" 1 CP/1.5 ECTS and "Environmental Science" 1 CP/1.5 ECTS.

The implementation of professional study courses is ensured by the Department of Rehabilitation, which promotes close cooperation between the lecturers involved in the implementation of study courses. The head of the study course provides feedback to students regarding the assessment of the study course, having discussed it in advance with the lecturers involved in the implementation of the study course.

When a Bachelor's thesis is written, lecturers of professional study courses participate both the presentation of the topics of Bachelor's theses and the pre-defence of Bachelor's theses.

Lecturers of professional study courses are involved in the preparation of questions for the joint national degree examination and the situational tasks when they are used, and in the joint analysis of mistakes made by students after the examination.

The StP director organises regular remote meetings and exchanges of thoughts with clinical placement supervisors.

Meetings of the directors of the study programme of the Faculty of Rehabilitation are organised under the leadership of the dean of the Faculty of Rehabilitation, which allow for the discussion of matters common to study programmes of functional specialists, for example, on joint study courses in study programmes.

The ratio of the number of students and teaching staff in the study programme is 341 students and 126 lecturers. The ratio of the number of students and teaching staff is 2.7.

# Annexes

III - Description of the Study Programme - 3.1. Indicators Describing the Study Programme		
Sample of the diploma and its supplement to be issued for completing the study programme	24.1_Anx_Sample_Diploma_and_Supplement_PBSP_Physiotherapy.pdf	24.1_Diploms_un_pielikums_PBSP_Fizioterapija.pdf
For academic study programmes - Opinion of the Council of Higher Education in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions (if applicable)		
Compliance of the joint study programme with the provisions of the Law on Higher Education Institutions (table) (if applicable)		
Statistics on the students in the reporting period	16_Anx_Statistics_Physiotherapy.pdf	16_pielik_Fizioterapija_statistika_lv.pdf
III - Description of the Study Programme - 3.2. The Content of Studies and Implementation Thereof		
Compliance with the study programme with the State Education Standard	17.1_pielik_PBSP_Fiziot_atbilstiba_izglitiba_standartam_ENG.pdf	17.1_pielik_PBSP_Fizioterapija_atbilstiba_izglitiba_standartam.pdf
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard or the requirements for professional qualification (if applicable)	18.2_Anx_Mapping_StP_to_Occupation_Standard_Physiotherapy.pdf	18.2_profesijas_standarta_kartejums_Fizioterapija.pdf
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)	17.2_Anx_Compliance_with_the_Field-Specific_Regulation_Physiotherapy.pdf	17.2_pielik_Atbalstiba_nozares_specifikajam_regulejumam_Fizioterapija.pdf
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	18.1_Anx_Study_course_mapping_Physiotherapy.pdf	18.1_Studiju_kursu_kartejums_studiju_rezultatu_sasniegsanai_Fizioterapija.pdf
The curriculum of the study programme (for each type and form of the implementation of the study programme)	19_Anx_Study_Plan_Physiotherapy.pdf	19_pielik_StP_planojums_Fizioterapija.pdf
Descriptions of the study courses/ modules	20_Anx_Study_course_description_Physiotherapy.pdf	20_pielik_Kursu_apr_Fizioterapija.pdf
Description of the organisation of the internship of the students (if applicable)	9_Anx_Organisation_of_student_placement_Physiotherapy.pdf	9_pielikums_Studejoso_prakses_organizacijas_apraksts_Fizioterapija.pdf
III - Description of the Study Programme - 3.4. Teaching Staff		
Confirmation that the academic staff of the doctoral study programme includes not less than five doctors, of which at least three are experts approved by the Latvian Council of Science in the branch or sub-branch of science in which the study programme intends to award a scientific degree (if applicable)		
Confirmation that the academic staff of the academic study programme complies with the requirements specified in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions (if applicable)		

# Pharmacy (49725)

Study field	Health Care
ProcedureStudyProgram.Name	Pharmacy
Education classification code	49725
Type of the study programme	Second level professional higher education programme (length of full time studies at least 5 years)
Name of the study programme director	Baiba
Surname of the study programme director	Mauriņa
E-mail of the study programme director	baiba.maurina@rsu.lv
Title of the study programme director	Dr. Pharm.
Phone of the study programme director	
Goal of the study programme	<i>The objective of the study programme is to provide students with the opportunity to acquire higher professional education in pharmacy and the qualification of a pharmacist to work in the pharmaceutical sector of the health care system.</i>
Tasks of the study programme	<p><i>To provide the opportunities to learn the following:</i></p> <ol style="list-style-type: none"> <li><i>1) methods for the extraction, analysis, and determination of the efficacy of medicinal products;</i></li> <li><i>2) the principles and methods of medicinal product preparation in pharmacies and drug manufacturing companies;</i></li> <li><i>3) ensuring the circulation of medicinal products in the national health care system;</i></li> <li><i>4) the basic principles of pharmaceutical care and implementation thereof;</i></li> <li><i>5) methods for providing professionally competent information to the population and health care workers;</i></li> <li><i>6) the use of the World Health Organisation's recommendations, European Union and Latvian legislative enactments and regulatory documents in the field of health;</i></li> <li><i>7) planning and conducting scientific research, preparing and publishing scientific articles and reports;</i></li> <li><i>8) working with other health care specialists;</i></li> <li><i>9) as well as promoting the formation of professional attitude and the development of a personality geared towards continuing education.</i></li> </ol>

Results of the study programme	<p><i>Knowledge.</i></p> <p><i>1. The student will be familiar with, able to describe and perform methods for the extraction, analysis and determination of the efficacy of medicinal products, the principles and methods of preparation of medicinal products in pharmacies and drug manufacturing companies, the management of the circulation of medicinal products in the health care system, the assessment of the impact of manufacturing and storage conditions on the quality of medicinal products. The student will be able to explain correctly, clearly and unambiguously the action, use, metabolism, side effects of medicinal products and answer questions related to medicinal products to both health care professionals and laypersons, combining and applying in specific situations the basic knowledge of the study programme courses, keeping in mind that the safety and well-being of patients are priorities.</i></p> <p><i>Skills and abilities.</i></p> <p><i>1. The student will be able to analyse complex situations and make decisions independently in the provision and organisation of pharmaceutical care, scientific research and regular self-evaluation.</i></p> <p><i>2. The student will be able to follow changes in the legislation of the Republic of Latvia regulating activities in the field of pharmacy; follow the latest regulatory documents of the European Union in the field of health and recommendations of the World Health Organization and follow them in their pharmaceutical activities.</i></p> <p><i>3. The student will be able to use professional pharmaceutical information sources and, by interpreting and evaluating scientific data in the field of medicinal product use, provide evidence-based information on medicinal products and rational and safe use of medicinal products.</i></p> <p><i>4. The student will be able to apply the basic principles of business and marketing in pharmaceutical activities and use information technologies necessary for professional activities.</i></p> <p><i>Competence.</i></p> <p><i>1. The student will be able to plan scientific research using the latest scientific findings, prepare projects, develop and standardise dosage forms, prepare scientific publications and reports, manage the work of junior scientific staff, support staff, pharmacy assistants.</i></p> <p><i>2. The student will be able to take responsibility for their own continuing professional development as a duty of every pharmacist and find opportunities to participate in continuing education activities on a regular basis.</i></p> <p><i>3. The student will be able to contribute to the development of pharmaceutical care and the prestige of the pharmacist profession, and participate in discussions on major public decisions affecting the field.</i></p> <p><i>4. Within the scope of their competence, the student will be able to promote healthy lifestyle and disease prevention, with a particular focus on population groups at risk; perform express diagnosis; be a full-fledged member of the health care team and interact with other health care specialists according to principles of mutual respect.</i></p>
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Final examination upon the completion of the study programme	<i>National examinations</i>
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## Study programme forms

### Full time studies - 5 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	5
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	200
Admission requirements (in English)	<i>Secondary education</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>Pharmacist's degree</i>

### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

### Full time studies - 5 years - english

Study type and form	<i>Full time studies</i>
Duration in full years	5
Duration in month	0
Language	<i>english</i>
Amount (CP)	200
Admission requirements (in English)	<i>Secondary education, Knowledge of the English at least at B2 level.</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>Pharmacist's degree</i>

### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

### Part time studies - 5 years, 6 months - latvian

Study type and form	<i>Part time studies</i>
Duration in full years	5
Duration in month	6
Language	<i>latvian</i>
Amount (CP)	200
Admission requirements (in English)	<i>Secondary education and first level professional higher education and qualification of a pharmacy assistant.</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>Pharmacist's degree</i>

**Places of implementation**

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

**Part time studies - 5 years, 6 months - english**

Study type and form	<i>Part time studies</i>
Duration in full years	5
Duration in month	6
Language	<i>english</i>
Amount (CP)	200
Admission requirements (in English)	<i>Secondary education and first level professional higher education and qualification of a pharmacy assistant.</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>Pharmacist's degree</i>

**Places of implementation**

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

### 3.1. Indicators Describing the Study Programme

**3.1.1. Description and analysis of changes in the parameters of the study programme made since the issuance of the previous accreditation form of the study field or issuance of the study programme license, if the study programme is not included on the accreditation form of the study field, including changes planned within the evaluation procedure of the study field evaluation procedure.**

The aim and tasks of the study programme (StP) are justified by the requirements of the Law of 20.06.2001 “[On the Regulated Professions and the Recognition of Professional Qualifications](#)”, the pharmacist’s profession standard and Latvian CM Regulations No. 68 (19.02.2002) “[Minimum Requirements of Educational Programmes for the Acquisition of the Professional Qualification of Dentist, Pharmacist, Nurse and Midwife](#)”. Learning outcomes (knowledge, skills, competence) in accordance with *qualification* level 7 of EQF (European Qualifications Framework) and Pharmacist’s profession standard evidence of the fulfilment of tasks and achievement of the aim of the study programme.

StP is also regulated by the Directive [2001/19/EC](#) of the European Parliament and of the Council concerning the professions of nurse responsible for general care, dental practitioner, veterinary surgeon, midwife, architect, pharmacist and doctor and Directive [2013/55/EU](#) of the European Parliament and of the Council on the recognition of professional qualifications.<sup>[1]</sup>

<https://eur-lex.europa.eu/legal-content/LV/TXT/PDF/?uri=CELEX:32013L0055&from=LV>

#### 3.1.1. Changes in StP parameters

Description and analysis of changes in the StP parameters, that have been made since the issuance of the previous accreditation sheet of the study direction or the issuance of the StP licence, if study programme is not included in the accreditation sheet of the study direction, including of changes planned within the assessment procedure of the study direction.

Table 1. Changes in parameters

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period (until 2022)	Planned changes within the assessment procedure (after the accreditation)
1.	Study direction	—	—
2.	Title of the StP	—	—
3.	Code according to the Latvian Education Classification	—	—

<b>No.</b>	<b>Parameter</b>	<b>Description and analysis of changes in StP parameters during the accreditation period (until 2022)</b>	<b>Planned changes within the assessment procedure (after the accreditation)</b>
4.	Head of the StP	—	—
5.	Scientific degree of the head of the StP	—	—
6.	Objective of the StP	—	—
7.	Tasks of the StP	—	—
8.	Learning outcomes to be achieved	—	The learning outcomes have been reviewed, consolidated and a compliance of study courses has been assessed (for mapping see Annex 18.1)
9.	Final examination upon the completion of the StP	—	—
10.	Type and form of studies	—	—
11.	Duration of implementation	—	—
12.	Language of implementation	—	—
13.	Workload of the StP (CP)	—	—

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period (until 2022)	Planned changes within the assessment procedure (after the accreditation)
14.	Admission requirements	<ul style="list-style-type: none"> <li>• CE certificate in chemistry or biology</li> <li>• Annual grade in chemistry</li> </ul>	—
15.	Degree to be awarded	—	—
16.	Qualification to be awarded	—	—
17.	Place of implementation	—	—

No significant changes to StP parameters have been made (see Table 1). Admission regulations have been adjusted providing that no CE certificate in chemistry is compulsory, but there should be the final grade in chemistry.

**3.1.2. Analysis and assessment of the study programme compliance with the study field. Analysis of the interrelation between the code of the study programme, the degree, professional qualification/professional qualification requirements or the degree and professional qualification to be acquired, the aims, objectives, learning outcomes, and the admission requirements. Description of the duration and scope of the implementation of the study programme (including different options of the study programme implementation) and evaluation of its usefulness.**

The aim of the study programme is to provide students with the opportunity to acquire higher professional education in pharmacy and the qualification of a pharmacist to work in the pharmaceutical sector of the healthcare system. To implement the aim of the study programme and to make it possible for the graduate to perform the duties, tasks and use the skills defined in the pharmacist's profession standard, the task of the study programme is to provide the opportunity to master:

- methods for the extraction, analysis, and determination of the efficacy of medicinal products;
- the principles and methods of medicinal product preparation in pharmacies and drug manufacturing companies;
- ensuring the circulation of medicinal products in the national health care system;
- the basic principles of pharmaceutical care and implementation thereof;

- methods for providing professionally competent information to the population and health care workers;
- the use of World Health Organisation recommendations, European Union and Latvian legislative enactments and regulatory documents in the field of health;
- planning and conducting scientific research, preparing and publishing scientific articles and reports;
- working with other health care specialists;
- as well as promoting the formation of professional attitude and the development of a personality geared towards continuing education.

The formulated learning outcomes in the StP follow from the aim and learning outcomes of study courses, while they are closely related to the aim and learning outcomes of the programme, which correspond to the degree to be obtained. This interrelation is clearly shown in the mapping of the study programme in Annex 18.1. Several study courses correspond to each learning outcome. Their implementation, planned in a certain order and with the appropriate level of complexity, corresponds both to the knowledge, skills and competences defined in EQF qualification level 7 and to the level of development of modern psychology in the international context to prepare high-quality specialists in this field.

StP “Pharmacy” is included in the health care direction because pharmacy is an integral part of health care.

The content of studies corresponds to the requirements of the Latvian Law of 20.06.2001 “On the Regulated Professions and the Recognition of Professional Qualifications”, pharmacist’s profession standard and Latvian CM Regulations No. 68 of 19.02.2022 “Minimum Requirements of Educational Programmes for the Acquisition of the Professional Qualification of Dentist, Pharmacist, Nurse and Midwife” and EQF qualification level 7. The Latvian Law of 20.06.2001 “On the Regulated Professions and the Recognition of Professional Qualifications” provides that the diploma of the education of a pharmacist shall certify that the relevant person has acquired appropriate theoretical and practical knowledge regarding medicinal products and substances which are used in the production of medicinal products, regarding the pharmaceutical technology and control, the use of medicinal products and regarding the laws and regulations in the field of pharmacy. In accordance with the pharmacist’s profession standard, a pharmacist is a senior health care professional, who organises and provides pharmaceutical care; ensures the circulation, preparation, standardisation, control, supervision, research, examination of documents, informative and advisory activities in the pharmaceutical field, as well as continuous professional improvement.

Section 16 of the Latvian Law of 20.06.2001 “On the Regulated Professions and the Recognition of Professional Qualifications” provides that the diploma of the education of a pharmacist shall certify that the owner thereof has acquired a study programme in the duration of at least five years, which comprises: full-time studies of at least four years in a higher education institution and a traineeship of the duration of at least six months during theoretical and practical training or at the end thereof in a general or open-type pharmacy or closed-type pharmacy or pharmacy of a medical treatment institution.

The programme has been created based on Directive 2013/55/EU of the European Parliament and of the Council setting requirements for pharmacist’s education and professional qualification. This document defines the requirements for pharmacist’s education, learning outcomes, number of CPs, duration of studies, need for placement.

The second level professional higher education StP “Pharmacy” (information in [Latvian](#), [English](#)) lasts five years and closes with obtaining a pharmacist’s qualification. The total number of credit points is 200 CP (300 ECTS) in the full-time programme and 200 CP (300 ECTS) in part-time

programme. The duration and volume of studies is defined by the above-mentioned regulations. Only students with level 1 professional education in pharmacy or qualification of a pharmacist's assistant are admitted to the part-time study programme. State placement of 20 CP / 30 ECTS (pharmaceutical dosage form technology part), as well as individual study courses or their parts mastered in college-level studies are recognised. In the part-time study programme, students study on Fridays and Saturdays.

Enclosed:

Annex 24.1. Model diploma and supplement thereto.

Annex 24.8. Sample study contract.

### **3.1.3. Economic and/ or social substantiation of the study programme, analysis of graduates' employment.**

The aim and tasks of study programme are closely related to the development and needs of the pharmaceutical sector. The programme prepares specialists who provide labour force for pharmacies, manufacturing and distribution of medicinal products, clinical trial organisations, drug circulation supervision institutions and scientific organisations. A pharmacist, when practising in pharmaceutical care in a pharmacy or hospital, supervises and promotes the correct and rational use of medicinal products, participates in the promotion of and education on public health.

Employers from pharmacies, drug manufacturing companies, hospitals, the State Agency of Medicines and the Pharmacists' Society of Latvia ([PSL](#)) are actively involved in the activities of the Council of the RSU Faculty of Pharmacy, providing placement for students, as well as participating as lecturers in the implementation of individual courses or lectures.

Latvia has well-developed pharmaceutical industry (drug manufacturing companies) and pharmaceutical science. It should be noted that the Faculty of Pharmacy has developed very good cooperation with industry both in the study process, for example, students have classes in cooperation with drug manufacturers ([Grindeks](#), [Olainfarm](#), [LMP](#), etc.) and in science, when writing research papers (Latvian Institute of Organic Synthesis ([LIOS](#)), Latvian Biomedical Research and Study Centre ([LBMC](#)), manufacturing facilities and pharmacies).

Pharmacy is one of RIS3 (Smart Specialisation Strategy) components, which provides additional opportunities for various pharmaceutical and medical research, which in turn facilitates the development of pharmaceutical science and involvement of students in research.

Students of pharmacy are currently involved in different externally funded scientific projects, which ensure the development of students' research skills and interest in the scientific industry.

According to the data of [PSL](#), more than half of pharmacists in Latvia are more than 50 years old and many pharmacists continue working also after they reach their retirement age. Employers believe that more attention needs to be paid to study programmes for young pharmacists so that young specialists can ensure decent generational shifts. According to the data of [PSL](#), the number of registered pharmacists is sufficient for the needs of Latvian pharmacies, however, there is a disproportion between regions – there is shortage of pharmacists in areas with low population density and Kurzeme region in both individual and pharmacy network pharmacies. There is shortage of pharmacists also in closed-type pharmacies, largely due to uncompetitive salaries. In February 2023, Latvian pharmaceutical industry companies (pharmacy networks, manufacturers,

non-governmental organisations) sent a [request to the Ministry of Health](#) regarding the need to double the number of state-funded study places.

The [Public Health Guidelines 2020-2027](#) provide that the availability of pharmacy services should be improved and pharmaceutical care should be developed. The pharmacist should find a customised approach to each patient, supporting doctors in ensuring rational medication treatment and addressing patients' problems that are anticipated or have already arisen due to the use of medicine, including the care of chronic patients.

Employers are satisfied with graduates of the study programme, they participate on a regular basis in state placement briefing for 5<sup>th</sup> year students and invite to have state placement in their pharmacies. In academic year 2021/2022, SIA "BENU Aptieka Latvija", SIA "Mēness aptieka", SIA "Latvijas aptieka" and SIA "A Apotheka" participated in the state placement briefing informing RSU students on placement and job opportunities in pharmacies.

StP is implemented in cooperation with employers inviting them Career Opportunity Week, Open Door Days, concluding agreements on provision of placement. Trips of students to drug manufacturing companies, manufacturing facilities of cosmetics and food supplements are organised. Cooperation agreements have been entered into with pharmacies, pharmacy networks, university hospitals and manufacturers of medicinal products. Students mainly prepare their research papers at departments of the [RSU Faculty of Pharmacy](#), drug manufacturing companies, as well as in cooperation with [LIOS](#) and [LBMC](#). Students are also included in the implementation of projects of the Fundamental and Applied Research Projects of the Latvian Council of Science ([LCS FARP](#)) and projects of the [Baltic Biomaterials Centre of Excellence \(BBCE\)](#), as well as use the research and training opportunities offered by the projects.

According to the information in databases of the Central Statistical Bureau, the State Revenue Service and the State Employment Agency, almost all graduates are employed (in 2019 – 97%). Graduates work in pharmacies, drug wholesalers, drug manufacturing facilities, scientific institutions, in recent years, many graduates get to international clinical trial contract organisations, drug manufacturing and drug authorisation companies. The RSU Faculty of Pharmacy (FF) maintains contacts with graduates, follow changes in their career (personal contacts, *Facebook*, *Linkedin*, RSU Alumni Association).

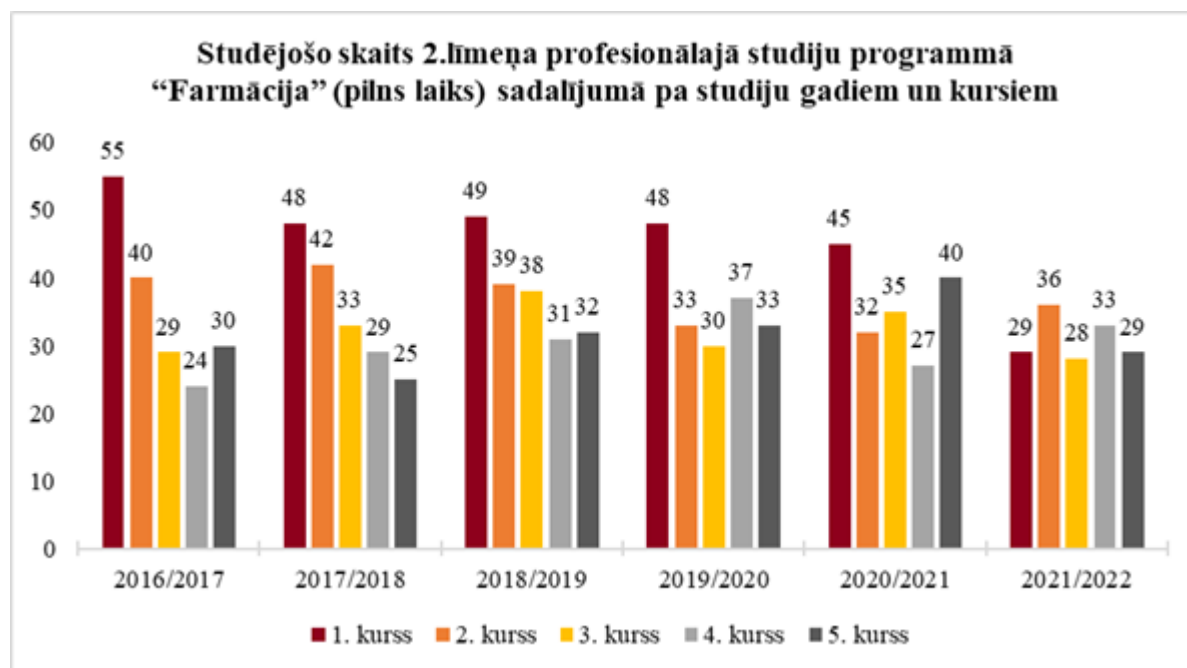
#### **3.1.4. Statistical data on the students of the respective study programme, the dynamics of the number of the students, and the factors affecting the changes to the number of the students. The analysis shall be broken down into different study forms, types, and languages.**

35–45 students are admitted to the RSU FF every year. State-funded study places are 100% filled, students studying for tuition fees are admitted as well. As the total number of pupils in the country decreases, there is also a slight decrease in the number of students, however, the competition for state-funded study places in pharmacy is increasing. In the part-time study programme, admission does not occur annually. Currently, there are part-time students only in the 5th year of study (see Annex 16).

There is also a slight drop-out during studies. In the full-time study programme, this is observed at the beginning of studies, when new students change their opinion about the selected profession or poor academic achievements are stated. In the part-time programme, there are student drop-outs



during the final years of studies, when it becomes difficult to combine studies with work in the pharmaceutical industry.



To increase pupils' interest in pharmaceutical studies, the FP is actively engaged in various informative activities, promoting the wide range of opportunities of the pharmaceutical industry.

In 2022 and 2023, the [School of Pharmacy](#) (Latvian only) of the Academy of Young Medical Students was established. 100 pupils participate in it, educating themselves on pharmaceutical sub-sectors, study, work and research opportunities. Several information materials on the pharmaceutical industry, studies at RSU FP, research results of students and lecturers were prepared and published on RSU website and social networks ([FP Facebook account](#)) have also been prepared. As a result of the activities of the School of Pharmacy, interest in pharmaceutical studies has significantly increased, and the number of documents submitted to study places has increased.

Since 2015, 8 students (1-2 students per year on average) go to Erasmus+ mobility trips to Czechia, Germany, Poland and the Netherlands, training for one semester or also implementing state placement in their 5<sup>th</sup> year in European pharmacies.

Since 2015, there have been 13 incoming Erasmus+ mobility visits, during which students from Czechia, Germany, Spain, Poland and Portugal prepared their research papers in cooperation with RSU FP lecturers.

Enclosed:

Annex 16. Statistical Data on Students.

### **3.1.5. Substantiation of the development of the joint study programme and description and evaluation of the choice of partner universities, including information on the development and implementation of the joint study programme (if applicable).**

Not applicable.

## 3.2. The Content of Studies and Implementation Thereof

**3.2.1. Analysis of the content of the study programme. Assessment of the interrelation between the information included in the study courses/ modules, the intended learning outcomes, the set aims and other indicators with the aims of the study course/ module and the aims and intended outcomes of the study programme. Assessment of the relevance of the content of the study courses/ modules and compliance with the needs of the relevant industry, labour market and with the trends in science on how and whether the content of the study courses/ modules is updated in line with the development trends of the relevant industry, labour market, and science.**

The mapping of the outcomes of the study programme and study courses allows to state that the StP and study courses correspond to the EQF/LQF *qualification* level 7, the requirements set in regulatory enactments and ensure student-centred approach. Mapping results show the interrelation between the information included in the study courses, the intended aims and learning outcomes and the relation between the aims of the study courses and the aims of the StP and the learning outcomes. Each of the study courses intends to achieve 2-4 defined results of the study programme, thus implementing the aim of the study programme.

Full-time studies have been organised as a study system of regular classes, part-time studies – in the form of cycles. Lectures, seminars, laboratory work, which students usually perform based on individual tasks, as well as situational tasks, problem discussions, work in small groups, development and defence of individual and group projects, field trips to Latvian drug manufacturing facilities, wholesalers, hospitals and open-type pharmacies, are used in the implementation of the study programme. For example, changes were made to the content of the course “Pharmacotherapy in Pharmacist’s Practice” were made due to the COVID-19 pandemic, when pharmacies introduced the vaccination service, supplementing it with theoretical and practical classes on vaccination.

Case and problem situation analysis is used where students need to apply and integrate knowledge into multiple study subjects (knowledge from pharmacology, pharmacotherapy, dosage from technology should be used to perform a task in social pharmacy). An Objective Structured Clinical Examination (OSCE) is used in the study course “Social Pharmacy and Pharmaceutical Care” and the national degree examination in pharmacology, pharmacotherapy and pharmaceutical care. Study course descriptions, mandatory readings and information materials have been included in the e-learning system of the higher education institution (“Moodle”), in separate study courses (normal physiology, social pharmacy and pharmaceutical care) students have the opportunity to perform tests, to view animations and submit study work. A *Turnitin* tool has been introduced using which lecturers can control cases of plagiarism and it is also used for correcting works.

Lectures are available in the form of videos and notes in e-learning platform. During a semester, students’ knowledge is assessed in seminars, colloquia and practical work tests. At the end of semesters or study courses those are written examination, the results of which are assessed collegially with participation of at least two lecturers. Students’ knowledge and skills are assessed on a continuous basis and the assessment is complex, which encourages students to study systematically throughout the studies. An accumulated test is practised in several study subjects – the student receives the assessment of knowledge on the basis of the results of his or her study work throughout the mastering of the study subject. The resulting grade in several courses is made

up in proportion to participation in seminars, the grade for presentation, the grade for the laboratory work performed, and the grade for the final examination is only one of these components. At the beginning of each course, the students are informed about the assessment criteria.

Lecturers in study courses familiarise students not only with the latest scientific research in the world, but also with their own and Latvian colleagues' scientific achievements, thus promoting students' interest in science and involvement in research.

To acquire research skills, students are involved in the following scientific projects:

- 2019–2023: European Agricultural Fund. Project No. 18-00-A01620-000028 “[Development of an anti-parasitic herbal product containing extracts of medicinal plants](#)” (Latvian only) (3 students).
- 2022–2026: European Agricultural Fund. Project No. 22-00-A01612-000007 “[Development of tansy, Latvian traditional herbal product, leaf extract dosage forms and its effect on the microbiome and anti-parasitic control of the digestive tract of sheep](#)” (Latvian only) (3 students)
- 2020–2026: “[Baltic Biomaterials Centre of Excellence \(BBCE\)](#)”, second phase (10 students)

Enclosed:

Annex 17.1. Compliance of the Study Programme With the National Educational Standard.

Annex 17.2. Compliance of the Study Programme With the Industry-Specific Regulatory Framework.

Annex 18.2. Compliance of the Qualification to Be Acquired Upon Completion of the Study Programme With the Professional Standard.

Annex 19. Planning of the Study Programme (For Each Type and Form of the Implementation of the Study Programme).

Annex 20. Description of Study Courses.

Annex 18.1. Mapping of the Study Courses for the Achievement of Learning Outcomes of the Study Programme.

**3.2.2. In the case of master's and doctoral study programmes, specify and provide the justification as to whether the degrees are awarded in view of the developments and findings in the field of science or artistic creation. In the case of a doctoral study programme, provide a description of the main research roadmaps and the impact of the study programme on research and other education levels (if applicable).**

Not applicable

**3.2.3. Assessment of the study programme including the study course/ module implementation methods by indicating what the methods are, and how they contribute to the achievement of the learning outcomes of the study courses and the aims of the study programme. In the case of a joint study programme, or in case the study programme is implemented in a foreign language or in the form of distance learning, describe in detail**

**the methods used to deliver such a study programme. Provide an explanation of how the student-centred principles are taken into account in the implementation of the study process.**

The study process is organised taking into account student-centred teaching and learning approach (for example, by involving students in the improvement and management of the study process). In addition, the FF ensures the involvement of students in scientific activities and encourages students to participate in various educational extra-curricular activities (School of Pharmacy, Pharmacy Science Club, Pharmacy Students' Association, etc.).

Both formative and summative assessment is used in the studies. Formative assessment takes place during everyday study process: by asking control questions to the students during the contact lessons, as well as by discussing the independent and laboratory works of students that are practised during the study process. In practical and laboratory works students are given individual and group tasks, which develop not only professional skills, but also create the possibility to master team work. Summative assessment takes place at the conclusion of each study course. Summative assessment tests are organised in a written form (in paper format or electronically) or as oral discussions, or also in a mixed form. Individual assessments of interim and final examinations of study courses are available to each student on their student profile in the RSU e-learning environment. Students can familiarise themselves with the criteria, conditions and binding procedures for the assessment of academic performance in the RSU Academic Regulations I (available in [Latvian](#) and [English](#)). Different field trips to laboratories, manufacturing companies and pharmacies of medical institutions are organised within courses.

In accordance with the epidemiological situation, studies are organised in classrooms or remotely. All lectures are available in the video format in e-learning. Different additional materials – videos of laboratory works, self-tests, interactive tasks with H5P modules are included in e-learning.

In order to maintain and improve the quality of the StP and its compliance with the labour market needs, mechanisms to receive feedback from students and enabling students to participate in StP quality monitoring have been established – to express opinions and suggestions regarding the content of study courses, their implementation methods, competences and working style of teachers. An average of 50-60% of students complete study course assessment questionnaires. In the spring semester of 2022, questionnaires were completed more actively – more than 70% of students assessed study courses. After the survey, the head of the study course, the head of the department and the head of the StP analyse the results of the surveys and provide their feedback on the student portal. Lecturers of departments of the Faculty of Pharmacy provide 100% feedback. The survey results are also discussed at department meetings every semester, deciding on the issue of improvement measures, for example, on the planned topics. To improve surveying, a new survey was created, which is coordinated also with the Student Union, and is available for filling out from the spring semester of 2022. Surveys of graduates are also performed to learn their opinion about the study programme. On average 25% of graduates complete questionnaires about StP. The results of the questionnaire are evaluated at Council meetings of the RSU FP with participation of students, lecturers, employers and management of the Pharmacists' Society of Latvia.

**3.2.4. If the study programme envisages an internship, describe the internship opportunities offered to students, provision and work organization, including whether the higher education institution/ college helps students to find an internship place. If the**

**study programme is implemented in a foreign language, provide information on how internship opportunities are provided in a foreign language, including for foreign students. To provide analysis and evaluation of the connection of the tasks set for students during the internship included in the study programme with the learning outcomes of the study programme (if applicable).**

The study programme includes propaedeutics placement in the first year of studies (1 CP / 1.5 ECTS) and state placement in the first year of studies (26 CP / 39 ECTS). The aim of state placement is to strengthen theoretical knowledge and practical skills of students. Placement lasts six months and is organised in open-type or hospital pharmacies. State placement is divided in four section with different volumes of CP trying to follow the real use of each section in pharmacist's work (practical and social pharmacy, pharmaceutical analysis, pharmaceutical dosage form technology, hospital pharmacy).

Learning outcomes of the state placement:

- hospital pharmacy (2 CP / 3 ECTS) – the student knows and can explain the circulation of medicinal products in a closed-type pharmacy, the tasks of a hospital pharmacist, is able to distinguish peculiarities of the work in a closed-type pharmacy compared to an open-type pharmacy. Theoretical knowledge acquired in study subjects such as practical pharmacy, social pharmacy and pharmaceutical care, pharmaceutical dosage form technology is used in this placement section;
- pharmaceutical dosage form technology (4 CP / 6 ECTS) – knows and can set out the principles and methods of preparation of medicinal products in a pharmacy, organisation of preparation of medicinal products in a pharmacy, is able to prepare all dosage forms of medicinal products independently, is aware of the incompatibility of different ingredients. Able to independently analyse complex situations in preparation of pharmaceutical dosage forms and make decisions when performing technological operations. Able to develop pharmaceutical dosage forms. Theoretical knowledge in study subjects such as laboratory equipment, pharmaceutical dosage form technology, industrial dosage form technology, physical pharmacy are applied in this placement section;
- pharmaceutical analysis (5 CP / 7.5 ECTS) – knows, can describe and use methods for analysis and determination of efficacy of medicinal products and able to evaluate the quality of medicinal products prepared in a pharmacy. Able to independently analyse complex situations and make decisions regarding the efficacy of medicinal products prepared in a pharmacy. Theoretical knowledge in subjects such as inorganic and organic chemistry, qualitative and quantitative analysis, pharmaceutical chemistry, physical pharmacy is applied;
- practical and social pharmacy (15 CP / 22.5 ECTS) – knows, can outline and ensure the circulation of medicinal products in the health care system, able to correctly, clearly and unequivocally explain the effects, use, metabolism, side effects of medicinal products, provide answers to both health care professionals and non-specialists on questions related to medicinal products. Able to independently analyse complex situations and make decisions when providing and organising pharmaceutical care. Able to follow changes in the legislation of the Republic of Latvia regulating activities in the field of pharmacy and follow them in their pharmaceutical activities. Able to apply the basic principles of business and marketing in pharmaceutical activities and use information technologies necessary for professional activities. Knowledge in subjects such as practical pharmacy and pharmaceutical law, social pharmacy and pharmaceutical care, pharmacology, pharmacotherapy, pharmaceutical and

medical chemistry is used.

A placement programme is created and approved for each placement, and it is available on the e-learning website. For each placement section, the student draws up a placement report according to the placement programme, for which an assessment is received. The organisation of placement is regulated by a process description on the provision, supervision and assessment of student placement at the Faculty of Pharmacy.

The Faculty of Pharmacy organises placement briefings before placement, informing on the course and regulations of placement. Due to the shortage of pharmacists in pharmacies, employers who offer placement opportunities and then jobs in their companies also actively participate in these activities. RSU FP has concluded cooperation agreements with the two largest university hospitals (RECUH, CCUH), as well as a number of individual agreements on placement in regional hospital pharmacies to implement placement in pharmacies of medical treatment institutions. Tripartite agreements on the provision of placement in pharmacies are concluded between RSU, the pharmacy and the student for the relevant period of placement. Students have a free choice whether to have placement at pharmacies offered by RSU FP or find a placement site according to their preferences.

Employers are also actively participating in the Career Days organised by RSU.

Every year, [AS "Olainfarm" supports the best pharmacy students with scholarships](#) and offers placement sites in the company.

Enclosed:

Annex 9. Description of the Organisation of Student Placement.

### **3.2.5. Evaluation and description of the promotion opportunities and the promotion process provided to the students of the doctoral study programme (if applicable).**

Not applicable.

### **3.2.6. Analysis and assessment of the topics of the final theses of the students, their relevance in the respective field, including the labour market, and the marks of the final theses.**

The vision of RSU is to be the leading medical, public and environmental health, as well as public science education and research centre in the Baltic region, providing internationally recognised research, so following the guidelines of the Smart Specialisation Strategy (RIS3) is the foundation of the RSU's medical and public health research platforms.

Students prepare their research papers under the supervision of RSU lecturers. Topics of research papers and execution sites are offered by both RSU departments and cooperation partners – LIOS, LBMC, drug manufacturers, manufacturers of cosmetics and food supplements, hospitals, pharmacies, non-governmental organisations. Research is often carried out within the framework of various scientific projects (BBCE, LCS FARP, RSS, etc.).

Most often, research papers are prepared on topics related to drug synthesis and mechanisms of action, the effect of pharmacogenetic factors on therapeutic efficacy, pharmacokinetic studies in humans and animals. Several studies focused on antimicrobial drug therapy problems, individualised medication therapy, drug therapy compliance, rational use and monitoring of medicines. In addition, possibilities of instrumental determination of medicinal products and their metabolites in different bodily fluids were analysed, studies were carried out on the composition, use and pharmacological efficacy of medicinal plants, development of new dosage forms.

Cooperation partners from scientific institutions, employers, representatives of the Ministry of Health and PSL also participate in reviewing and defending research papers.

Several students present their research results annually at the [RSU International Student Conference](#), earning prize-winning places for demonstration of their research results.

Individual students publish their research results in scientific journals, for example in the academic year 2021/2022:

- **Bārzdīņa A.**, Paulausks A., Bandere D., Brangule A. [The Potential Use of Herbal Fingerprints by Means of HPLC and TLC for Characterization and Identification of Herbal Extracts and the Distinction of Latvian Native Medicinal Plants](#). *Molecules*. 2022, 27(8), 2555. doi:10.3390/molecules27082555.
- Stelfa G., Vavers E., Svalbe B., **Serzants R.**, Miteniece A., Lauberte L., Grinberga S., Gukalova B., Dambrova M., Zvejniece L. [Reduced GFAP Expression in Bergmann Glial Cells in the Cerebellum of Sigma-1 Receptor Knockout Mice Determines the Neurobehavioral Outcomes after Traumatic Brain Injury](#). *Int J Mol Sci*. 2021, 22(21), 11611. doi:10.3390/ijms222111611.
- **Ozolins R.**, Plotniece M., Pajuste K., Putralis R., Pikun N., Sobolev A., et al. [1,1'-{\[3,5-Bis\(\(dodecyloxycarbonyl\)-4-phenyl-1,4-dihydropyridine-2,6-diyl\)\]bis\(methylene\)}bis\[4-\(anthracen-9-yl\)pyridin-1-ium\] Dibromide](#). 2022(3). doi.org/10.3390/M1438

Enclosed:

Annex 22. Topics of students' final papers.

### 3.3. Resources and Provision of the Study Programme

**3.3.1. Assessment of the compliance of the resources and provision (study provision, scientific support (if applicable), informative provision (including libraries), material and technical provision, and financial provision) with the conditions for the implementation of the study programme and the learning outcomes to be achieved by providing the respective examples.**

Study work is mainly organised on the basis of the [Department of Pharmaceutical Chemistry](#) and [Department of Applied Pharmacy](#). Students master medical courses at clinical departments of the [Faculty of Medicine](#).

Since in recent years, the RSU Faculty of Pharmacy has been developing very rapidly, external funding has been raised, which is intended for the construction of a new faculty building with the [Laboratory of Finished Dosage Forms \(LFDF\)](#) and purchasing of equipment and technologies for

study and scientific needs.

- ERDF project No. 1.1.4/17/I/011 “[Development of RSU research infrastructure in the field of pharmacy](#)”. Total funding – **EUR 4,390,862.00**.
- ERDF project No. 1.1.0/17/I/006 “[Development of the study environment at Rīga Stradiņš University](#)”. Total funding – **EUR 6,243,821.00**.
- Horizon 2020, project No. 857287 “[Baltic Biomaterials Centre of Excellence \(BBCE\)](#)”. Total funding – **EUR 14,999,869.50** (cooperation partners: RTU, Latvian Institute of Organic Synthesis and RSU Institute of Stomatology).

Modern premises, a comfortable, safe and evolving environment for students, as well as the opportunity to learn and work with newer analytical and technological equipment promote further scientific growth of both staff and students in the field of science, and to learn the knowledge and skills necessary for the labour market. The new LFDF will provide a technological platform for study courses and will also be a platform for conducting scientific research, a workplace for scientific groups and projects, as well as provide the services needed for the pharmaceutical industry.



Figure 1. Functions of the Laboratory of Finished Dosage Forms (LFDF)

Although the laboratories and the new building that will be one of the most modern in Europe, started functioning only at the beginning of 2023, new analytical (HPLC – FD/PDA/RI, HPLC – MS/MS, GC/HS – FID, GC – FID, ICP – MS/MS, *Calorimeter, Rheometer, Polarimeter*, FTIR, TLC/HPTLC, RAMAN, XRD) and technological (*High-shear mixer, Fluid bed dryer/processor, Roller compactor, Bench top tablet press-simulator, Rotary tablet press, Automatic capsule filling machine, Tablet coater, Hot Melt Extrusion, Semi-automatic blister packing machine*) equipment has already been purchased, which will ensure a full solid dosage form manufacturing process and research.

The RSU Library fully provides students and academic staff with access to scientific databases and study literature.



In the supply of e-resources, five e-book databases and seven full-text databases of journals are available in the pharmaceuticals sector. Since 2021, a special database of e-books in the pharmaceutical sector *AccessPharmacy* is subscribed.

E-books in pharmacy are available in subscribed databases *AccessPharmacy*, *ebook Academic Collection (EBSCO)*, *Ebook Central (Proquest)*, *AccessMedicine and ClinicalKey*. For example, the *Ebook Central (Proquest)* contains 1035 e-books in section “Pharmacy”, but *ebook Academic Collection (EBSCO)* contains 425 e-books. Subscribed multidisciplinary databases *Ebook Central (ProQuest)* and *EBSCO eBook Academic Collection* offer e-books in different fields and from different publishers that provide selected information results searching by various topics / keywords. The *AccessPharmacy* database is an interactive, educational platform in pharmacology and pharmacy by *McGraw-Hill*, which offers internationally recognised textbooks, video materials, images, information on medicines and other electronic resources.

The full texts of scientific articles in pharmacy are available in subscribed databases: *SAGE Premier 2022*, *Health Research Premium Collection (Proquest)*, *MEDLINE Complete (EBSCO)*, *BMJ Journals*, *Wiley Online Journals*, *Science Direct*, *Academic Search Complete (EBSCO)*. The single search *Primo* shows 593 journal names in “Pharmacy and Pharmacology”. Two databases – *DynaMed* and *ClinicalKey* – contain information on medicinal products.

Section “[List of recommended reading e-books](#)” on the website of the library lists the e-books referred to in study programmes – both purchased and from subscribed databases (such sections as “Pharmacology and Toxicology”, “Pharmacy, Pharmaceutical Chemistry”, “Medical Chemistry”, etc. are available).

Enclosed:

Annex 23.1. Assessment of the informative and methodological provision regarding Library resources for the implementation of the study direction “Health Care” in accordance with the requirements of the guidelines

### **3.3.2. Assessment of the study provision and scientific base support, including the resources provided within the framework of cooperation with other science institutes and higher education institutions (applicable to doctoral study programmes) (if applicable).**

Currently, RSU, with the support of co-financing from the European Regional Development Fund (ERDF), is developing pharmaceutical research infrastructure – LFDF, which will ensure research and training of students in the field of industrial pharmaceutical technology. Two functional units of equipment will be created in the laboratory:

- solid dosage form development unit with equipment for preparing and packaging powders, granules, tablets and capsules;
- standardisation unit with equipment for research of raw materials, intermediates, final products and materials, as well as for quality control by chromatographic, spectrometric and other analytical methods.

Academic staff at the Faculty of Pharmacy is actively involved in various research projects. Projects can be implemented using the equipment available at departments. The students who are involved in the BBCE project, can use resource sharing opportunities with RTU and Latvian Institute of Organic Synthesis.

Involvement in projects promotes scientific competences, growth of academic staff and the fulfilment of criteria, as well as ensures the involvement of students in research projects in order to promote the development of student research projects, as well as increase the understanding of students regarding scientific activities.

Currently, faculty staff and students are involved in several projects, which take place in cooperation with other Latvian universities – Riga Technical University, Latvia University of Life Sciences and Technologies, as well as scientific institutes (Latvian Institute of Organic Synthesis, Latvian Biomedical Research and Study Centre) (the information on projects is available on websites of projects (in [Latvian](#) and [English](#))).

**3.3.3. Indicate data on the available funding for the corresponding study programme, its funding sources and their use for the development of the study programme. Provide information on the costs per one student within this study programme, indicating the items included in the cost calculation and the percentage distribution of funding between the specified items. The minimum number of students in the study programme in order to ensure the profitability of the study programme (indicating separately the information on each language, type and form of the study programme implementation).**

The full time study programme in the Latvian flow is planned to be financed from state budget funds and the funds of individuals and legal entities setting the tuition fee for the Latvian flow of EUR 5200 per year of studies. The tuition fee can be subject to discounts in accordance with internal norms and regulations. The number of students planned to be achieved in the Latvian flow study programme in five years is 151 students, enrolling 31 students in the first year of studies and planning minimum drop-outs in the following years. Following high inflation and under conditions of a rapid increase in prices of energy sources, the result of the full-time Latvian flow study programme is negative, because there is shortage of funding from state budget funds in accordance with CM Regulations No.994 – study base costs no longer cover infrastructure maintenance costs. The information on additional performance funding allocated, which was approved in the budget of the Ministry of Education and Science, will be available in the second half of 2023. Meanwhile, the full-time study programme in the English flow, which lasts five years, will be able to cover implementation and development costs, if a total of 74 students are enrolled, who pay a tuition fee of EUR 10,750 per year.

The part-time Latvian flow study programme is planned to be financed from the funds of individuals and legal entities setting the tuition fee of EUR 5200 per year of studies. The number of students planned to be achieved in the Latvian flow study programme in five years is 66 students. Following high inflation and under conditions of a rapid increase in prices of energy sources, the costs of the part-time Latvian flow study programme exceed income just a little bit. Meanwhile, the part-time study programme in the English flow, which lasts five years, will be able to cover implementation and development costs, if a total of 56 students are enrolled, who pay a tuition fee of EUR 7500 per year.

The funding is used for staff remuneration, attraction of visiting university lecturers, taxes, maintenance of IT infrastructure, purchase of equipment and devices and study visit costs. In addition to the direct costs of the implementation of lectures and classes, the StP must cover the infrastructure maintenance costs (facilities, IT solutions) and other RSU common resources used in StP (Student Service, Library, organisation of the study process, grant for the Student Union and

other support and administrative functions).

StP is implemented by the RSU Faculty of Pharmacy Department of Pharmaceutical Chemistry, Department of Dosage Form Technology, Department of Applied Pharmacy, Department of Pharmacology and Dean's office of the Faculty of Pharmacy, Faculty of Medicine, Institute of Anatomy and Anthropology Department of Morphology, Department of Anaesthesiology and Intensive Care, Department of Occupational and Environmental Medicine, Department of Biology and Microbiology, Department of Human Physiology and Biochemistry, Department of Physics, Department of Internal Diseases, Department of Pathology, Department of Clinical Skills and Medical Technologies and Statistical Unit, Faculty of Public Health and Welfare, Department of Sports and Nutrition and Department of Public Health and Epidemiology, Department of Humanities and Language Centre. Remuneration of the academic staff in the first year of the Latvian flow full-time StP is planned to be approximately 107 thousand EUR and approximately 68 thousand EUR in the full-time English flow study programme.

Table 2. **Information on student costs**

**Costs of the full-time study programme in the Latvian flow**

<b>Name</b>	<b>Result with the existing tuition fee</b>
Average income per student, EUR	5240
Average cost per student, EUR	7388
Academic staff, %	46
Department resources, %	7
Scholarships, %	4
Fixed costs, %	3
Overheads, %	40

**Costs of the full-time study programme in the English flow**

<b>Name</b>	<b>Result with the existing tuition fee</b>
Average income per student, EUR	11578
Average cost per student, EUR	11479
Academic staff, %	37
Department resources, %	4
Fixed costs, %	2
Overheads, %	57

**Costs of the part-time study programme in the Latvian flow**

<b>Name</b>	<b>Result with the existing tuition fee</b>
Average income per student, EUR	5200
Average cost per student, EUR	5204
Academic staff, %	60
Department resources, %	10
Other direct expenditure, %	1
Fixed costs, %	1
Overheads, %	28

#### **Costs of the part-time study programme in the English flow**

<b>Name</b>	<b>Result with the existing tuition fee</b>
Average income per student, EUR	7050
Average cost per student, EUR	6542
Academic staff, %	58
Department resources, %	10
Fixed costs, %	1
Overheads, %	31

### **3.4. Teaching Staff**

**3.4.1. Assessment of the compliance of the qualification of the teaching staff members (academic staff members, visiting professors, visiting associate professors, visiting docents, visiting lecturers, and visiting assistants) involved in the implementation of the study programme with the conditions for the implementation of the study programme and the provisions set out in the respective regulatory enactments. Provide information on how the qualification of the teaching staff members contributes to the achievement of the learning outcomes.**

The research directions and results of the academic staff involved in the study programme focus on successful implementation of the study programme “Pharmacy” and cooperation with the pharmaceutical industry.

Lecturers actively participate in international and national research projects.

50% of lecturers involved in StP have a doctoral degree. Most of lecturers (27 lecturers) involved in StP have been awarded the status of an expert in the Latvian Council of Science; in order to qualify for it, it is necessary to have three anonymously reviewed scientific publications published in a scientific journal indexed in the *Scopus* or *Web of Science* database, including a scientific publication that is available in open access; or two such publications and a scientific monograph.

Lecturers constantly participate in research work, speak at scientific conferences, in international conferences with reports. Lecturers participate in the *Erasmus+* mobility programme reaching in foreign universities (for example, Switzerland, Germany, Italy). About 50% of lecturers involved in the programme has a doctoral degree, moreover, all doctoral students of the doctoral study programme “Pharmacy” are involved also in academic work reading classes or supervising student research papers.

Lecturers represent all sub-sectors of pharmacy – pharmacology, pharmacognosy, dosage form technology, pharmaceutical company, chemical pharmacy and social pharmacy. Lecturers share their scientific results also in their study courses. All lecturers prepare peer-reviewed international publications and review scientific articles.

Professor Maija Dambrova, who received several significant national and scientific awards, is a co-author of the scientific monograph “Scientific writing and dissemination of research results” and also the lecturer with the highest number of publications at RSU – 158 *Scopus* publications, Hirsch index – 29.

The Faculty of Pharmacy is one of the smallest faculties at RSU, however, every year lecturers of the faculty publish their research results in scientific journals. Number of publications (*Scopus* and *Web of Science*) is growing. Thus, for instance, FP lecturers as authors and co-authors had 23 publications in 2019, 30 in 2020, 37 in 2021, 30 in 2022. Lecturers publish their scientific results in excellent journals such as *British Journal of Clinical Pharmacology*, *Basic and Clinical Pharmacology and Toxicology*, *Toxicology Letters*, *Pharmacological Research*, *Biochemical Journal*, *Nutrients*, *Journal of Infection and Chemotherapy*, *Medicina*, *Molecules*, *Nanomaterials*, *Journal of Ethnopharmacology*, *Plants*, *BMC Primary Care*, *BMC Medical Education*, *BMJ (Online)*, *Journal of Pharmaceutical Policy and Practice*.

Several lecturers work on the editorial boards of scientific journals, participate in funded research projects, are experts in various projects, as well as lecturers are members of Latvian and international professional organisations. Lecturers (M. Dambrova, D. Bandere, E. Poplavska, I. Urtāne, B. Mauriņa, A. Gavrilova and others) get actively involved in educational activities – give interviews on radio and TV, publish in popular science journals and social media. Lecturers also participate in several COST activities creating new networks of scientists, looking for cooperation partners. Projects carried out by the academic staff contribute to the development of scientific capacity and competitiveness, which could be also characterised by the increase in the number of scientific articles in *Scopus* or *Web of Science* journals, which strengthens the authority and recognisability of RSU as a centre of study and science. For more information, please see CVs of lecturers or <https://science.rsu.lv>.

Faculty staff and students are currently involved in several projects:

- **Horizon 2020.** 2020–2026: [Baltic Biomaterials Centre of Excellence \(BBCE\)](#), second phase (led by Professor D. Bandere, involves: Assistant Professor A. Brangule, Associate Professor B. Mauriņa, Associate Professor I. Skadiņš). RSU LFDF is involved in the BBCE project to supplement knowledge of the project consortium and integrate competence in the field of pharmaceutical technology. LFDF is gradually extending its research direction from oral solid

dosage forms to biomaterials as drug delivery systems. The project has been created in cooperation with RTU, the Latvian Institute of Organic Synthesis, the RSU Institute of Stomatology, as well as AO Research Institute Davos (Switzerland) and Friedrich Alexander University Erlangen-Nürnberg (Germany) in accordance with the Latvian Smart Specialization Strategy in the following fields – *biomedicine, medical technology, biopharmacy and biotechnology*. The project widely offers training opportunities for faculty staff, doctoral students and students.

- **Latvian Council of Science FARP** project No. LZP-2020/1-00502020.-2023 “[Treatment of tuberculosis: research of prospects of personalised therapy](#)”. Associate Professor R. Ranka, Professor D. Bandere
- **European Agricultural Fund:**
  - 2019-2023, project No. 18-00-A01620-000042 “[Development of bioeffective fodder for biological farms](#)”. Associate Professor I. Bārene, Assistant Professor I. Daberte.
  - 2019-2023, project No. 18-00-A01620-000028 “[Development of an anti-parasitic herbal product containing extracts of medicinal plants](#)”. Professor D. Bandere, Associate Professor R. Koka.
  - 2022-2026, project No. 22-00-A01612-000007 “[Development of tansy, Latvian traditional herbal product, leaf extract dosage forms and its effect on the microbiome and anti-parasitic control of the digestive tract of sheep](#)”. Professor D. Bandere, Assistant Professors A. Brangule, O. Brante, R. Šukele, A. Bārzdīņa.
- **RSU grants:**
  - 2020-2021, project No. 23030103 “[Evaluation of potential genetic factors in case of tuberculosis](#)”. Associate Professor R. Ranka.
  - 2022-2023, project No. 6-ZD22/11 /2022 “Optimisation of drug delivery systems when modelling dissolution processes”. Assistant Professor A. Brangule.
  - 2022-2023, project No. 6-ZD22/9 /2022 “Chemical “fingerprints” of herbal products: problem solution tool”. Associate Professor B. Mauriņa.
  - 2022-2023, project No. 6-ZD22/10 /2022 “High pressure hydrostatic sterilization/radiation sterilization: advanced biomaterial treatment method for future gel implant materials”. Associate Professor I. Skadiņš.
  - 2022-2023, project No. 6-ZD22/15 /2022 “Benefits of the arterial hypertension therapy assessment model combining laboratory and clinical possibilities under polypharmacy conditions”. Associate Professor I. Stukēna.
  - 2022-2023, project No. 6-ZD22/25 /2022 “Pharmacogenetics of drug resistant tuberculosis”. Associate Professor R. Ranka.

Visiting lecturers are involved to improve the content of study programmes, for example, professors and specialists from Italy, Finland, Australia, United States, Estonia, Czechia and Lithuania.

1-2 doctors of pharmacy defend doctoral theses every year and get involved in academic work during their doctoral studies (all doctoral students are involved in academic work) and continue work as lecturers and scientists after they obtain a doctoral degree (S. Norvaiša, O. Kiseļova, I. Sīle).

The RSU Human Resources Department supervises that, when a new study programme is developed, academic and scientific staff for its provision is attracted in compliance with provisions of the Law on Higher Education Institutions, including provisions of Section 55(1)(3), (28) and (30), etc, and the Law on Scientific Activity. RSU Human Resources Department checks the official language skills when selecting the staff, and while summarising documents during the preparation process of academic election.

The RSU regularly organises seminars and other forms of professional improvement and experience exchange activities in order to strengthen and develop the skills and competences of academic

staff, for example, seminars on pedagogy and research methodology problems are offered annually. To improve their competences and skills lecturers can benefit from seminars offered by the School of Junior Academics and the RSU Centre for Educational Growth. The Doctoral School offers focused research competence development seminars and networking events intended both for doctoral students and lecturers.

From 1 January 2017 to 1 October 2022, 69 lecturers of the study programme “Pharmacy” participated in continuing education activities organised by the RSU Centre for Educational Growth attending more than 170 training activities of different content. The lecturers of the study programme “Pharmacy” spent 6569 academic hours on continuing education activities.

Thus, for example, the lecturers participated in the following activities:

- Creation of animated visual studio materials;
- Reference management tool *EndNote*;
- Remote work of student groups with the *Miro* tool;
- Open access to scientific information;
- *Collaboration and Partnership Towards Professional and Sectoral Development: Local, National, Transnational*;
- *Contextualizing the use of Webinar in Higher Education*;
- *Creating Engaging and Interactive Classrooms through Active Learning Techniques*;
- The *PubMed* database and its tools for searching for scientific publications;
- Digital Darwinism – what it means for us each and our institution; Teaching in intercultural environments;
- Think tank: How to assess to learn?;
- Think tank: Feedback as a source of cognition and possibility to improve oneself;
- Creation of electronic tests;
- Drafting of interactive study materials (H5P);
- Interactive presentations and real-time feedback in the *Mentimeter* tool;
- Improvisation in pedagogical activities;
- How games activate teaching and learning;
- How to promote the acquisition of transversal skills relevant to the working environment in the study process;
- How to create effective image and text compositions in teaching materials;
- Potential of conflict for building cooperation;
- Research methodology and statistical processing of data;
- Mediation – wilful and responsible conflict resolution culture at a university;
- Visualization of content in presentations;
- Development of a study course;
- Formulation and evaluation of learning outcomes;
- *Turnitin*: How to assess students’ papers more qualitatively and effectively?;
- Creating videos: complex in a simple and short way.

Enclosed:

Annex 24.6. Declaration on Doctoral Degrees, LCS Experts – Applicable to Doctoral Study Programmes.

Annex 24.7. Analysis of the Composition of Teaching Staff.

### **3.4.2. Analysis and assessment of the changes to the composition of the teaching staff**

### **over the reporting period and their impact on the study quality.**

Changes in the teaching staff involved in StP are insignificant, the involved academic staff has proven to be a strong team. The changes have taken place for objective reasons (change of workplace, retirement) and this has not affected the quality of studies.

RSU purposefully takes measures so that changes in the teaching staff, if any, do not negatively affect the quality of the study programme implementation and the compliance of the study programme with the requirements specified in regulatory enactments. RSU Centre for Educational Growth organises various educational activities: thematic cycles, seminars, guest lectures, conferences, discussions, etc., which are available free of charge to every member of the academic family of RSU.

The research work of the academic staff is related to current topics in the field, in an interdisciplinary context, namely, research conducted by the academic staff is an important contribution to both the development of the field and the development of the study programme, as well as the improvement of the study content. Through research, the lecturers bring the novelties of the field to their study courses. Teaching staff prepares scientific papers, participates in conferences and practical seminars, develops textbooks and methodological materials.

Having defended a doctoral thesis new doctors are promoted to Assistant Professor's position (in 2021 O. Kiseļova, I. Sīle), in the last six year B. Mauriņa, R. Ranka, R. Vilšķērsts have become Associate Professors and D. Bandere – Professor.

Industry professionals also work as lecturers: B. Galviņa – Director of Finished Dosage Forms Manufacturing of Grindeks, E. Poplavska – Head of the Medicines Marketing Authorisation Department of the State Agency of Medicines, M. Iljašenko – medical and clinical research specialist of Olainfarm, N. Krauja – member of the board of SIA "Apotheka", etc.

The faculty is alternation of generation because several lecturers are retiring, the number of new lecturers – assistants and lecturers – increases. Many of the assistants are RSU doctoral students who associate their futures with scientific and academic work. Individual new colleagues have stopped working or significantly reduced their work at RSU by going to clinical research organizations or drug authorisation companies that provide higher salaries.

RSU, in cooperation with the support of [Boris and Inara Teterev Foundation](#), offers targeted scholarships to both young and already experienced lecturers for the modernisation of study courses. In recent years, seven FP lectures have obtained scholarships and modernised study courses, for example, in academic year 2021/2022 "Pharmaceutical Pharmacology", "Inorganic Chemistry", "Qualitative Analysis", "Pharmacotherapy in Pharmacist's Practice" and "Quantitative Analysis".

**3.4.3. Information on the number of the scientific publications of the academic staff members, involved in the implementation of doctoral study programme, as published during the reporting period by listing the most significant publications published in Scopus or WoS CC indexed journals. As for the social sciences, humanitarian sciences, and the science of art, the scientific publications published in ERIH+ indexed journals or peer-reviewed monographs may be additionally specified. Information on the teaching staff included in the database of experts of the Latvian Council of Science in the relevant field of science (total number, name of the lecturer, field of science in which the teaching staff**



**has the status of an expert and expiration date of the Latvian Council of Science expert) (if applicable).**

Not applicable.

**3.4.4. Information on the participation of the academic staff, involved in the implementation of the doctoral study programme, in scientific projects as project managers or prime contractors/ subproject managers/ leading researchers by specifying the name of the relevant project, as well as the source and the amount of the funding. Provide information on the reporting period (if applicable).**

Not applicable.

**3.4.5. Assessment of the cooperation between the teaching staff members by specifying the mechanisms used to promote the cooperation and ensure the interrelation between the study programme and study courses/ modules. Specify also the proportion of the number of the students and the teaching staff within the study programme (at the moment of the submission of the Self-Assessment Report).**

The study process is clearly, understandably and logically structured. An established and successfully functioning quality management system ensures continuous transparency of the study process, allows to stably advance towards the goal and reach it successfully. In the first years of studies, mainly basic subjects (anatomy, biology, genetics, physics, mathematics, etc.) are learned, from the 3<sup>rd</sup> year of studies – pharmacy-specific study courses created in a consecutive and interrelated way.

The cooperation of the teaching staff is manifested, for example, in the mutual visiting of lectures and classes of the lecturers (observation of teaching), which allows to evaluate the strengths and weaknesses of the work; preparation of lecturers' annual reports on academic, scientific and creative activities, publications, participation in scientific research and scientific conferences; promotion of international exchange of lecturers, creating an opportunity for lecturers to gain experience in foreign universities; inviting highly qualified visiting lecturers and lecturers to give guest lectures, including from foreign universities. Within the BBCE project, visiting researchers [Jaleh Amirian](#) and [Supandeep Singh Hallan](#) were attracted to the Faculty of Pharmacy, they get involved in the activities of the student research interest group and development of student research papers. The scientific supervisor [Valentyn Mohylyuk](#) was attracted to LFDF.

Visiting lectures are also provided by visiting lecturers from Estonia, Lithuania, Finland, Czechia, United States, Australia and other countries.

Several lecturers are involved in the implementation of several study courses, which facilitates the diversification of study content, while maintaining equal requirements for students. The teaching staff is regularly invited to discuss issues related to the study process and improvement thereof.

Their attitude towards the duties to be performed clearly confirms the possibilities of sustainable development of the StP.

Seminars on current topics are organised for mutual cooperation among lecturers, for example, activities of the RSU Centre for Educational Growth to get feedback. Several lecturers cooperate with each other, jointly implementing study courses, working on research projects, managing students' work. After business trips and experience exchange lecturers share their experiences with colleagues at science seminars of the Faculty of Pharmacy. Lecturers actively participate in Research Breakfasts organised by RSU, where they establish new contacts, find cooperation partners or educate themselves in organising scientific work.

The work of the teaching staff is a team work in which everyone sees their place and task. The qualification and motivation of the teaching staff to work in the provision of the study process and research is high. Relationships with students are humane, forthcoming, while maintaining strict requirements for each study task.

It is possible for students to receive help, consultations and support from lecturers during the study process, as well as it is possible to contact the head of StP or dean in case of uncertainties to get consultations to implement the study process both individually and collectively as much as possible. Students are also involved in the improvement and control of the quality of the StP, they are urged to express their opinions on the quality of studies at faculty council meetings and in talks with lecturers on a regular basis. Thus, shortcomings are found and potential solutions are obtained to promote students' motivation in further study process. The ratio of the number of students and teaching staff in the study programme: 176 students and 93 lecturers. The ratio of the number of students and teaching staff is 1.9.

# Annexes

III - Description of the Study Programme - 3.1. Indicators Describing the Study Programme		
Sample of the diploma and its supplement to be issued for completing the study programme	24.1_Diploms_Farmaceits_eng.pdf	24.1_piel_diploms_farmacija.pdf
For academic study programmes - Opinion of the Council of Higher Education in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions (if applicable)		
Compliance of the joint study programme with the provisions of the Law on Higher Education Institutions (table) (if applicable)		
Statistics on the students in the reporting period	16_Anx_Stud_statistics_2L_Pharmacy.pdf	16_pielik_Farmacija_statistika_lv.pdf
III - Description of the Study Programme - 3.2. The Content of Studies and Implementation Thereof		
Compliance with the study programme with the State Education Standard	17.1_Anx_National_educ_standard_Pharmacy.pdf	17.1_pielik_atb_izgl_stand_2L_Farmacija_jaunais.pdf
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard or the requirements for professional qualification (if applicable)	18.2_Anx_Mapping_prof_standard_Pharmacy.pdf	18.2_pielik_Prof_standarta_kartejums_Farmacija.pdf
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)	17.2_Anx_Compliance_with_Field-Specific_Regulations_Pharmacy.pdf	17-2_pielik_Atb_MK_lv.pdf
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	18.1_Anx_Mapping_st_courses_achiev_learn_outcomes_Pharmacy.pdf	18.1_St_kursu_StP_rezult_kartejums_2L_Farmacija_lv.pdf
The curriculum of the study programme (for each type and form of the implementation of the study programme)	19_Anx_Plan_for_full-time_studies_Pharmacy.pdf	19_pielik_StP_planojums_Farmacija.pdf
Descriptions of the study courses/ modules	20_Anx_Study_course_description_Pharmacy.pdf	20_pielik_Kursu_apr_Farmacija.pdf
Description of the organisation of the internship of the students (if applicable)	9_Anx_Organisation_of_student_placement_Pharmacy.pdf	9_pielik_Prakses_org_Farmacija2022_lv.pdf
III - Description of the Study Programme - 3.4. Teaching Staff		
Confirmation that the academic staff of the doctoral study programme includes not less than five doctors, of which at least three are experts approved by the Latvian Council of Science in the branch or sub-branch of science in which the study programme intends to award a scientific degree (if applicable)		
Confirmation that the academic staff of the academic study programme complies with the requirements specified in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions (if applicable)		

# Rehabilitation (45722)

Study field	<i>Health Care</i>
ProcedureStudyProgram.Name	<i>Rehabilitation</i>
Education classification code	<i>45722</i>
Type of the study programme	<i>Academic master study programme</i>
Name of the study programme director	<i>Signe</i>
Surname of the study programme director	<i>Tomsone</i>
E-mail of the study programme director	<i>Signe.Tomsone@rsu.lv</i>
Title of the study programme director	<i>Dr.med.</i>
Phone of the study programme director	
Goal of the study programme	<i>To broaden knowledge of rehabilitation science and develop competence in evidence-based practice that will enable graduates to introduce and implement high quality, innovative rehabilitation services in health care and other fields, and to actively participate and strengthen scientific research in the field of rehabilitation.</i>
Tasks of the study programme	<p><i>1. Enhance students' understanding of theoretical concepts relevant to the field of rehabilitation and develop the ability to integrate the latest scientific evidence, analyse interrelationships and evaluate the development of the sector in the context of current developments in the fields of health care and social services.</i></p> <p><i>2. Enable students to develop the ability to synthesise and apply knowledge in the field of rehabilitation in solving current problems in research and practice at the individual, community, societal and governmental levels [through independent work on course projects as part of their studies].</i></p> <p><i>Enable students to develop the ability to apply scientific evidence in decision-making at the target group level in designing or adapting effective and structured rehabilitation services [through independent work on course project].</i></p> <p><i>4. Enhance students' understanding of current research issues in the field of rehabilitation and enable them to plan and conduct scientific research [with support from the lecturer].</i></p> <p><i>5. Encourage and empower students to critically analyse current problems in the field of rehabilitation and to seek alternative and innovative solutions to them in research, clinical practice and in the organisation of services.</i></p> <p><i>6. Enable students to discover and use the benefits, challenges and opportunities of interprofessional and interdisciplinary cooperation [while studying in a group of different rehabilitation professionals].</i></p>

Results of the study programme	<p>1. Understand and critically evaluate current developments in the field of rehabilitation in the context of trends in the organisation and development of healthcare and social services.</p> <p>2. Understand the multiprofessional nature of the field of rehabilitation and able to independently facilitate teamwork in the rehabilitation process.</p> <p>3. Understand, assess and analyse the dynamics of human functioning and the consequences of limitations at different levels (individual, group, society) in a public health context.</p> <p>4. Summarise and analyse the results of their professional activity and understand the need to improve their professional competence.</p> <p>5. Take the initiative and share their knowledge, contributing to the development of their profession and the field of rehabilitation as a whole.</p> <p>6. Assess the needs and resources of their profession or organisation, take initiative and contribute to the development of their profession and the field of rehabilitation as a whole.</p> <p>7. Independently analyse current issues in the field of rehabilitation, independently plan and carry out research activities in accordance with the basic principles of research in rehabilitation, with an understanding and responsibility for the impact of their activities on the individual or society.</p> <p>8. Independently seeks alternative and innovative solutions to current problems in clinical work and organisation of services in rehabilitation based on scientific evidence in the field.</p>
Final examination upon the completion of the study programme	Defence of Master's Thesis

## Study programme forms

### Full time studies - 2 years - latvian

Study type and form	Full time studies
Duration in full years	2
Duration in month	0
Language	latvian
Amount (CP)	80
Admission requirements (in English)	Bachelor's degree or the second level professional higher education in health care, an entrance examination
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	Master's Degree of health Science in Health Care
Qualification to be obtained (in english)	-

**Places of implementation**

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

**Full time studies - 2 years - english**

Study type and form	<i>Full time studies</i>
Duration in full years	2
Duration in month	0
Language	<i>english</i>
Amount (CP)	80
Admission requirements (in English)	<i>Bachelor's degree or the second level professional higher education in health care, an entrance examination. For studies in English, a proof of English language proficiency of at least level B2.</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	<i>Master`s Degree of health Science in Health Care</i>
Qualification to be obtained (in english)	-

**Places of implementation**

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

### 3.1. Indicators Describing the Study Programme

**3.1.1. Description and analysis of changes in the parameters of the study programme made since the issuance of the previous accreditation form of the study field or issuance of the study programme license, if the study programme is not included on the accreditation form of the study field, including changes planned within the evaluation procedure of the study field evaluation procedure.**

Table 1. Changes in the StP Parameters

No.	Parameter	Description and analysis of changes in the StP parameters during the accreditation	Planned changes within the assessment procedure
1.	Study direction	—	—
2.	Title of the StP	—	—
3.	Code according to the Latvian Education Classification	—	—
4.	Head of the StP	—	—
5.	Academic degree of the head of the StP	—	—
6.	Objective of the StP	The objective has not changed in substance, but the wording has been adjusted.	—
7.	Tasks of the StP	The tasks have not changed in substance, but the wording has been adjusted, additionally formulated one task.	—
8.	Learning outcomes to be achieved	In 2017, the StP mapping identified 15 outcomes to be achieved, which in some cases were similar to each other. The wording of the outcomes to be achieved has been revised and the number thereof has been optimised, the number of results has decreased to 8.	

No.	Parameter	Description and analysis of changes in the StP parameters during the accreditation	Planned changes within the assessment procedure
9.	Final examination upon the completion of the StP	—	—
10.	Type and form of studies	—	—
11.	Duration of implementation	—	—
12.	Language of implementation	—	—
13.	Volume of the StP (CP)	—	—
14.	Admission requirements	Clarification has been made in the admission requirements, indicating that an entrance exam can be taken without narrowing it down to a structured essay.	—
15.	Degree to be awarded	—	—
16.	Qualification to be awarded	—	—
17.	Place of implementation	—	—

Table 1 shows that there have been no significant changes in the main parameters of the StP since the previous accreditation, but necessary adjustments have been made to ensure that the defined objective, tasks and outcomes to be achieved of the study programme are clearly and comprehensibly formulated. For example, the StP goal emphasizes the deepening of knowledge in rehabilitation science and the development of competence for the implementation of evidence-based practices. The task formulations emphasize the opportunities provided by the StP for the development of students' knowledge, skills and competences, as well as add one task for opportunities to discover and use the benefits, challenges and opportunities of inter-professional



and inter-sectoral cooperation in the study process. By optimising the formulations of the results to be achieved, fragmentation of the results was eliminated, and their total number decreased to 8. The changes made more accurately reflect the current content of the StP.

The changed format of the entrance examination allows the applicant to better reflect and express his motivation for studying at the AMSP "Rehabilitation".

The experience gained during the Covid-19 pandemic has shown that an academic Master's programme can combine face-to-face and remote online classes, so a pragmatically planned and technology-enriched study process can contribute to student attraction and retention.

**3.1.2. Analysis and assessment of the study programme compliance with the study field. Analysis of the interrelation between the code of the study programme, the degree, professional qualification/professional qualification requirements or the degree and professional qualification to be acquired, the aims, objectives, learning outcomes, and the admission requirements. Description of the duration and scope of the implementation of the study programme (including different options of the study programme implementation) and evaluation of its usefulness.**

Academic Master's study programme (AMSP), according to MK regulation no. 322 Second classification level code "45", "Rehabilitation" (IKK- 45722) has been implemented at Rīga Stradiņš University (RSU) since 2015 and is part of the study direction implemented by RSU, it will correspond to the thematic group of education "Medical services" (ISCED code - 0915). The StP planning corresponds to Cabinet Regulation No. 240 Regulations Regarding the State Academic Education Standard, as adopted on 13 May 2014. The content of the study programme ensures a set of knowledge, skills and competences in accordance with the knowledge, skills and competence of framework level 7 set out in the classification of education in Latvia. The total amount of StP is 80 credit points (CP) (120 ECTS), of which 60 CP (90 ECTS) are theoretical study courses and 20 CP (30 ECTS) are the development of a master's thesis. AMSP Rehabilitation is a full-time on-site study program that is implemented in two years of study or four semesters. Upon graduation from the program, graduates are awarded a Master's degree in Health Sciences in Health Care.

On 5 November 2014, AMSP Rehabilitation obtained the licence for study programme implementation in Latvian and English. The programme was launched in autumn 2015 with 12 students enrolled in one group studying in Latvian. In May 2017, in the accreditation of the RSU Health Care study direction, the StP was accredited until May 2023.

The objective of AMSP Rehabilitation is to deepen knowledge in rehabilitation science and develop competence in evidence-based practice that will enable alumni to introduce and implement high-quality, innovative rehabilitation services in health care and other fields, as well as to actively participate in and strengthen scientific research in the field of rehabilitation.

To achieve the goal of StP, six tasks have been set:

1. Enhance students' understanding of theoretical concepts relevant to the field of rehabilitation and develop the ability to integrate the latest scientific evidence, analyse interrelationships and evaluate the development of the sector in the context of current developments in the fields of health care and social services.
2. Enable students to develop the ability to synthesise and apply knowledge in the field of rehabilitation in solving current problems in research and practice at the individual,

community, societal and governmental levels [through independent work on course projects as part of their studies].

Enable students to develop the ability to apply scientific evidence in decision-making at the target group level in designing or adapting effective and structured rehabilitation services [through independent work on course project].

4. Enhance students' understanding of current research issues in the field of rehabilitation and enable them to plan and conduct scientific research [with support from the lecturer].
5. Encourage and empower students to critically analyse current problems in the field of rehabilitation and to seek alternative and innovative solutions to them in research, clinical practice and in the organisation of services.
6. Enable students to discover and use the benefits, challenges and opportunities of interprofessional and interdisciplinary cooperation [while studying in a group of different rehabilitation professionals].

AMSP Rehabilitation provides that as a result of its successful graduation, the graduate has achieved the following learning outcomes:

1. Understand and critically evaluate current developments in the field of rehabilitation in the context of trends in the organisation and development of healthcare and social services.
1. Understand the multiprofessional nature of the field of rehabilitation and able to independently facilitate teamwork in the rehabilitation process.
1. Understand, assess and analyse the dynamics of human functioning and the consequences of limitations at different levels (individual, group, society) in a public health context.
1. Summarise and analyse the results of their professional activity and understand the need to improve their professional competence.
1. Take the initiative and share their knowledge, contributing to the development of their profession and the field of rehabilitation as a whole.
1. Assess the needs and resources of their profession or organisation, take initiative and contribute to the development of their profession and the field of rehabilitation as a whole.
1. Independently analyse current issues in the field of rehabilitation, independently plan and carry out research activities in accordance with the basic principles of research in rehabilitation, with an understanding and responsibility for the impact of their activities on the individual or society.
1. Independently seeks alternative and innovative solutions to current problems in clinical work and organisation of services in rehabilitation based on scientific evidence in the field.

The StP is delivered as a full-time programme, with at least 30% contact hours in the form of lectures, practical classes and seminars. Some contact hours are also ensured remotely, i.e. online (if this form of delivery of studies is conducive to achieving the learning outcomes). Each study course includes independent work (at least 70%), carried out individually or in groups, which involves searching for, systematically collecting and analysing the latest scientific publications in the field, carrying out the course assignments or preparing for seminars. Each study course includes a description of independent work tasks to be completed individually or in work groups in accordance with the aims of study course and intended volume.

AMSP Rehabilitation does not include placement.

Given the interdisciplinary nature of the field of rehabilitation, the admission rules of the program

provide for the admission of a wider range of applicants. For admission to the study program, higher education is required – bachelor's degree or second level professional higher education in health care.

Initially (2015-2017), AMSP Rehabilitation admission rules required a face-to-face examination to assess English language skills and a motivation letter (essay) to assess the applicant's motivation. Since 2018, the admission examination requires the applicant to submit a structured essay of no more than three pages, following the defined structure and scope of the content. The essay must reflect the understanding of current developments in the field of rehabilitation and multiprofessional cooperation in rehabilitation (30 %), motivation for studies, incl. existing experience in research as a basis for further studies (25%), a clearly defined future perspective of academic and professional activity – what the student will be doing after studies (20%), research topic for the Master's thesis, justification of its relevance (25%).

Admission of students takes place in accordance with the Admission Regulations for the relevant academic year and external regulatory enactments approved by the RSU Senate. In accordance with Paragraph 3 of the Cabinet Regulation No. 846 "Regulations Regarding the Requirements, Criteria and Procedures for Admission to Study Programmes"<sup>4</sup> adopted by the Cabinet of Ministers on 10 October 2006, the regulations for admission to study programmes for the next academic year shall be developed, approved and made public (also on the website) by 1 November of the current year.

The technical course of admission has been developed and described in the RSU process description No. 39 "Organisation of admission to RSU study programmes in Latvian" and in the process description No. 38(5) "Organisation of admission to RSU study programmes in English". RSU applicants make an electronic application on the website:

<https://www.rsu.lv/en/study-here/admissions> .

In accordance with Cabinet Regulation No. 505 "Regulations for the Recognition of Competences Acquired Outside Formal Education or Acquired through Professional Experience and Study Results Achieved in Previous Education", a person has the right to apply to RSU with an application for the recognition of knowledge, skills and competences acquired in previous education or professional experience in a study programme implemented by a higher education institution or a part thereof. The decision on the recognition of study results achieved in previous education and professional experience shall be taken by the commission for the recognition of study results achieved in previous education or professional experience established by the higher education institution. Its rights, obligations, conditions for formation, as well as the specific conditions of the procedure for the recognition of study results achieved in previous education or professional experience are included in the Regulation on recognition of study results achieved in previous education or professional experience at RSU.

### **3.1.3. Economic and/ or social substantiation of the study programme, analysis of graduates' employment.**

The situation in Latvia and in the world – the rapid development of medical technologies, rising costs of health care, inequalities in the provision of health services, demographic changes in the population and the prevalence of chronic diseases and functional limitations, the need for accessible, efficient care services of high quality – is a challenge for the health care sector. In the education process, it is essential to train professionals who are able to drive change in the health

care sector, including rehabilitation, to ensure the transfer of accumulated knowledge based on clinical evidence to everyday practice, to implement person-centred placement and interdisciplinary collaboration in the coordination of health care services and ensuring succession thereof, including in the provision of rehabilitation services (Public Health Guidelines 2022-2027, available in [Latvian](#) only; *WHO Global Disability Action Plan 2014-2021*, available in [English](#) only; *WHO Rehabilitation 2030*, available in [English](#) only).

*AMSP Rehabilitation* was created to provide alumni of the Faculty of Rehabilitation (FoR) with Master's level studies in health care with a focus on rehabilitation in accordance with the current policy documents of the Latvian health care sector at that time, such as the programme Human Resources Development in Health Care 2006-2015 (description available only in [Latvian](#)), which emphasises the importance of education to provide the field with a sufficient number of qualified specialists. The FoR plays a key role in training functional specialists – physiotherapists, occupational therapists, audio speech therapists, technical orthopaedists, nutritionists and art therapists – through unique study programmes in Latvia. Therefore, the FoR is also responsible for the continuing education of functional specialists in line with demand and the changing situation in the labour market of health care. AMSP Rehabilitation ensures the continuity of academic and scientific activity in the FoR for all undergraduate study programmes in accordance with RSU's vision of research-based higher education of high quality. AMSP Rehabilitation provides an opportunity for students – professionals working in the field of rehabilitation or interested in it – to deepen their theoretical knowledge and analytical skills in health care organisation and management, including the types of rehabilitation services and mutual integration thereof, principles of quality management and control in health care, as well as to develop and improve their clinical reasoning skills, ability to integrate scientific research and latest scientific findings into clinical work in rehabilitation according to their professional qualification. According to the analysis of the AMSP Rehabilitation applicant data, the majority of students here are graduates of the Faculty of Rehabilitation Bachelor's study programmes.

Feedback from students, alumni and employers is essential to ensure the achievement of the AMSP Rehabilitation objectives and to improve the quality of studies. It is based on systematic surveys or on the use of the Study Quality Council's operational resource.

At the end of each study course, students are invited to fill in study course evaluation questionnaires,<sup>[1]</sup> which have been available at RSU in electronic format since 2015. Unfortunately, the response rate of Master's students is not high, ranging from 22% in the spring semester 2019 to 53% in the spring semester 2021 for the period 2018-2021 (see Annexes 21.1 and 21.2). The highest response rate was in spring 2022 – 72% of questionnaires were completed. To encourage students to fill in the survey questionnaires, various information campaigns are usually organised at RSU at the end of the semester, and lecturers remind students about filling in the questionnaires and invite them to do so at the end of their study courses. Feedback on study courses is also obtained through informal discussions between lecturers and students at the end of the course (discussions with elements of reflection) – the information obtained in this way is not recorded in minutes, but is very valuable for the lecturer when thinking about necessary changes to improve the quality of course delivery.

The average course assessment between 2018 and 2021 ranged from 3.21 to 3.69 (on a scale of one to four), with a gradually increasing trend.

Completion rates for the StP evaluation questionnaires were lower between 2017 and 2021, but then only individual students from each group participated in the surveys (total number of respondents was 15 out of 46 alumni) and completion rates ranged from 10% (academic year 2018/2019) to 50% (academic year 2019/2020).

The students who have completed the programme evaluation questionnaires are either completely satisfied (six respondents) or rather satisfied (eight respondents) with their choice of study programme. Only one student in the 2019/2020 academic year indicated that they were rather dissatisfied with their choice of study programme. Regarding the choice of university, all respondents indicated “completely satisfied” (10 respondents) or “rather satisfied” (five respondents). Alumni are also “completely satisfied” (six respondents) and “rather satisfied” (eight respondents) with the learning outcomes achieved, and only one student in the 2019/2020 academic year indicated that they were rather dissatisfied with the learning outcomes achieved.

Both the study course evaluation questionnaires and the StP evaluation questionnaires are thoroughly reviewed and analysed, students receive feedback on study course evaluations, and survey results are discussed with the study course leaders, the lecturers involved and the heads of the responsible departments. Some of the changes currently being implemented in the study plan, such as the migration of study courses by semester, are based on student comments on the continuity of study courses.

Study Quality Council of the AMSP Rehabilitation includes both student and employer representatives. The Council meets at least once a semester and updates on the study programme are sent by electronic correspondence. Joint meetings with the Study Quality Council of the Physiotherapy study programme have also been held to address certain issues (e.g. in 2020-2021, when the optimisation of the Master’s programme Physiotherapy and the need to develop new content for the Master’s study programme, as well as the establishment of professional Master’s programme Physiotherapy in perspective were discussed).

[1] Student survey is organised in accordance with the procedure defined by RSU and included in Process Description No. 22 Surveys:

- for each study course in e-studies (for more information on e-studies, see Section 3.3 of the description of the study direction), students complete the study course evaluation questionnaire, where they can express their opinion and proposals regarding both the content of the study course, implementation methods, competences and work style of the lecturer;
- upon completion of studies, students evaluate the study programme in general by completing the survey regarding the study programme.

#### **3.1.4. Statistical data on the students of the respective study programme, the dynamics of the number of the students, and the factors affecting the changes to the number of the students. The analysis shall be broken down into different study forms, types, and languages.**

The number of students enrolled in AMSP Rehabilitation has gradually increased from 10 in the 2016/2017 academic year to 16 in the 2021/2022 academic year. Since 2015, 10 state-funded study places were provided each year, and since 2021 – 16 state-funded study places per year. The total number of students in the programme, broken down by funding source, was as follows:

- the number of state-funded study places increased from 20 in the 2020/2021 academic year to 27 in the 2021/2022 academic year – an average of 22;
- private funding increased from one place in the 2016/2017 academic year to five places in the 2020/2021 academic year.

The dynamics of the number of alumni varies from seven alumni in the 2016/2017 academic year to 12 in the 2017/2018 academic year, with an average of nine alumni per year. The dynamics were affected by the decision of some students to both discontinue their studies and to take academic leave, in which case studies are interrupted and the student returns and completes their studies at a later date. During the implementation of the StP, four students dropped out due to academic failure, nine students dropped out of their own volition and two students have not resumed their studies after an academic leave.

The experience of implementing AMSP Rehabilitation in English is rather limited: in 2018, four foreign students (three from India and one from Sri Lanka) were enrolled, but they gradually discontinued their studies, both due to academic failure and other reasons, e.g. one student discontinued his studies because the programme did not suit his interests (physician's diploma and wish to study in residency to become a physician of physical and rehabilitation medicine).

The implementation of AMSP Rehabilitation includes cooperation with other higher education institutions in Latvia and abroad, with an emphasis on the mobility of lecturers, which ensures the circulation of new knowledge and contributes to the quality and competitiveness of the programme content. For example, a long-standing collaboration has been established with Katharina Stibrant Sunnerhagen, visiting professor from the University of Gothenburg (Sweden). Professor Katrina Bannigan from the University of Plymouth (UK) has been involved in the development of some research-related study course content, but this collaboration stopped in 2018 due to changes in her academic activities. Professor Aija Kļaviņa from the Latvian Academy of Sport Education (LASE) has been working in the Master's Thesis Defence Committee (since 2019), Associate Professor Signe Tomsone participates in the work of the LASE Master's Thesis Defence Committee and has also participated in the work of the Vilnius University Master's Thesis Defence Committee (2021) for the Master's programme Rehabilitation. There was also an attempt to develop closer cooperation with Master's programme Rehabilitation at Arcada University of Applied Sciences in Finland (2017-2019).

One of the weak aspects of AMSP Rehabilitation is the lack of student mobility (no programme-specific cooperation agreement has been signed), and students have not taken advantage of mobility opportunities under existing RSU agreements, for example with Arcada University of Applied Sciences in Finland. This is partly due to the fact that new professionals starting Master's studies tend to work in their main day jobs and have significant responsibilities in other areas of their lives, so there is little interest in student mobility with a minimum mobility period of at least two months.

AMSP Rehabilitation provides study visits to the most important rehabilitation centres or hospital rehabilitation departments in Latvia and the Baltic region to the extent possible for the exchange of experience (there have been visits to Klaipėda University (Lithuania), Haapsalu Rehabilitation Centre (Estonia), Liepāja Regional Hospital, Vidzeme Hospital, NRC Vaivari, Vaivari Technical Aids Centre, Social Integration State Agency, etc.). Such short and focused study visits are available to the majority of students and compensate quite substantially for the objective barriers to international mobility. This initiative was interrupted due to the restrictions of the Covid-19 pandemic, but is planned to be relaunched.

Students are provided with opportunities to keep up-to-date with the latest developments in the field by attending international and local conferences and open lectures organised by RSU and other universities.

### **3.1.5. Substantiation of the development of the joint study programme and description and evaluation of the choice of partner universities, including information on the**

**development and implementation of the joint study programme (if applicable).**

## **3.2. The Content of Studies and Implementation Thereof**

**3.2.1. Analysis of the content of the study programme. Assessment of the interrelation between the information included in the study courses/ modules, the intended learning outcomes, the set aims and other indicators with the aims of the study course/ module and the aims and intended outcomes of the study programme. Assessment of the relevance of the content of the study courses/ modules and compliance with the needs of the relevant industry, labour market and with the trends in science on how and whether the content of the study courses/ modules is updated in line with the development trends of the relevant industry, labour market, and science.**

The StP contents are based on the content of separate study courses, continuity and interconnection of the study courses, which was given much thought during the development of AMSP Rehabilitation and now during the implementation of the programme.

This is why the StP consists of study courses, the learning outcomes of which provide in-depth theoretical knowledge on the organisation, integration and types of services in medical and social rehabilitation, as well as on the organisation of health care and the principles of quality management and control of services. This knowledge provides a context to enhance students' ability to critically analyse current problems in the field of rehabilitation and to seek alternative and innovative solutions to them in research, clinical work and service organisation. Working independently (individually and in groups) on course projects, students deepen their understanding of current issues in scientific research in the field of rehabilitation and improve their analytical skills necessary for clinical reasoning and decision-making in the rehabilitation process, and develop the skills to integrate the latest scientific findings into the clinical work of a functional specialist according to their qualification. The relationship between the study course results and the StP results is illustrated by the StP mapping in Annex 18.1.

For foreign students, taking into account the requirements of Article 56, Part 3, Clause 1 of the Law on Higher Education Institutions, in order to implement that the learning of the national language must be included in the mandatory scope of study courses, if studies in Latvia are expected to last longer than six months or exceed 20 credit points, the course "Latvian language for foreign students" (2 CP / 3 ECTS), by lecturer Inga Laizāne takes place.

In order to achieve the objectives and tasks of the StP, study courses are planned in conceptual blocks, thus achieving logical continuity of courses and integration of content. For example, in the first semester, study courses are implemented, the learning outcomes of which provide in-depth theoretical knowledge of the organisation and management of health care, the organisation, integration and types of services in medical and social rehabilitation, and the principles of quality management and control in health care, as well as projects management. (For foreign students, taking into account the requirements of [Article 56, Part 3, Clause 1 of the Higher Education Law](#) (only in Latvian), the study course "Latvian language for foreign students" (2 CP / 3

ECTS), lecturer Inga Laizāne.) This knowledge of the health care and rehabilitation context is further used to develop and improve students' analytical skills for clinical reasoning and decision-making in the rehabilitation process (second semester study courses Measurements in Rehabilitation and Multiprofessional Rehabilitation Team) and the ability to integrate the latest scientific knowledge into the clinical work of functional specialists according to their qualifications (third semester study course Effective Rehabilitation Programmes). In parallel, study courses are implemented that strengthen students' competence in research planning and implementation (Selective Stages of the Research Process in the second semester and Research Methods in Rehabilitation in the third semester), as well as deepen their knowledge on topics relevant to the field of rehabilitation (e.g. Environment and Assistive Technologies, Work Capacity Assessment and Disability Prevention, etc.). The development of Master's thesis gives students the opportunity to develop the ability to critically analyse current research trends in their field of professional activity and in the field of rehabilitation, to plan and conduct research. The learning objectives of the study courses are aimed at fostering the development of students' creative, social, communication and organisational skills. The plan of study courses is attached in Appendix 19. The interrelationship between study courses goals and results and study programme goals and tasks is illustrated in programme mapping in the Appendix 18.1.

Topicality of the content of study courses and compliance with the needs of the industry, labour market and scientific trends is achieved because AMSP Rehabilitation is implemented by Latvian rehabilitation professionals and experts with many years of experience also in education and research. They continuously maintain their competence by studying current literature in the field, keeping abreast of the latest developments in the field, attending thematic conferences and congresses, participating in various educational events and research projects, the results of which are further transferred into practice. Teaching staff also keeps up to date with changes and developments in the health care sector in Latvia and worldwide. Specialists recognized in the rehabilitation sector in Latvia are involved in the implementation of study courses (Professor Aivars Vētra, Associate Professor Anita Vētra, Assistant Professor Guna Bērziņa, etc.) who actively participate in the professional and scientific organisations of the field on a European scale, while Professor Katharina Sunnerhagen from the University of Gothenburg (Sweden), who is one of the leading specialists in the field of neurorehabilitation in Europe and in the world, participates in the implementation of the study course Scientific Evidence-Based Rehabilitation. It should be noted that the students of the programme are practicing rehabilitation professionals with their own experience and a certain level of competence – the study course assignments include elements of critical thinking and reflection on rehabilitation practice, leading to the identification of issues of relevance to the field.

The updating of the content of study courses once a year takes place in the interaction of different factors, following the development trends in the sector and healthcare in Latvia, Europe and the world. Discussions on the development trends of the sector takes place in the Quality Council of the StP, in which employers also participate, as well as the study course assessments are analysed (See Annex 23.1). For example, following the trends in the industry and the demand of employers, a new compulsory elective study course "Smart Technologies in Rehabilitation" is being prepared, which is planned to be offered to master's students already in 2023/2024. The study course is being developed with the support of a targeted grant from the Boris and Inara Teterev Foundation (BITF), it is being prepared by Guna Semyonova, a lecturer at the Department of Rehabilitation, who defended her doctoral thesis on the use of smart textiles in rehabilitation in autumn 2022. Based on the comparison of StP with other similar master's study programmes implemented in European countries in 2022 and discussing the results of the analysis in the Quality Council of the StP, it is planned to gradually increase the share of compulsory (B) in the content of the programme in the coming years and also to offer elective (C) study courses (see Annex 4.1).



**3.2.2. In the case of master's and doctoral study programmes, specify and provide the justification as to whether the degrees are awarded in view of the developments and findings in the field of science or artistic creation. In the case of a doctoral study programme, provide a description of the main research roadmaps and the impact of the study programme on research and other education levels (if applicable).**

The FoR has developed methodological guidelines approved by the Council on the elaboration and defence of the Master's thesis, which complement the process described in the document "RSU Regulation on the Elaboration and Defence of the Qualification Paper, Student Research Paper, Bachelor's Thesis and Master's Thesis". The methodological guidelines are periodically revised and updated according to the current trends in the process of students' research paper development. The topic and supervisor of the final paper is chosen in collaboration between the student and the potential supervisor and the StP director or head of the Department of Rehabilitation (DoR).

The Master's theses developed and defended since 2017 largely reflect the priority research areas defined by both the DoR and the Rehabilitation Research Laboratory (RRL). The research directions defined by the DoR are:

- daily functioning of people of different ages;
- the impact of the environment on an individual's functional abilities;
- aspects of quality of life and functioning in children with disabilities;
- using assistive technologies in rehabilitation;
- transient and chronic incapacity for work, etc.

The research directions defined by the RRL (since November 2022, the Laboratory no longer exists as a separate structural unit and its functions and resources have been fully taken over by the DoR) are:

- functioning of a person and its limitations;
- socio-economic and organisational issues in rehabilitation, current clinical issues.

In addition, students can participate in ongoing research projects (including doctoral dissertation research) at the DoR, as well as at RSU in general (for example, using the RSU Research Platform, information about which is available both in [Latvian](#) and in [English](#)), or independently choose a research topic of interest, for example, relevant to current developments in the student's field of professional activity.

The choice of the Master's thesis topic is purposefully guided and supported already in the 2nd semester, when the study course Selective Stages of the Research Process is taught and the lesson topics and assignments included in it are focused on the analysis of current problems in the rehabilitation sector, the formulation of research questions and the development of the Master's thesis topic proposal. The study course concludes with a topic proposal report, which is usually assessed by a commission of lecturers (including external experts representing the field). For some students, the Master's thesis topics are approved by the DoR Council at the end of the 2nd semester, for others – during the 3rd semester. During the Master's thesis development, students are scheduled for interim reports and pre-defence of the Master's thesis, thus ensuring systematic monitoring of the thesis development and the necessary advisory support from experienced lecturers and experts in the field of rehabilitation.

After the Master's thesis is defended, based on the discussions, assessment and recommendations

of the defence commission, Master's students are invited to publish their research results at professional association conferences, local and international industry conferences, as well as to produce scientific publications.

**3.2.3. Assessment of the study programme including the study course/ module implementation methods by indicating what the methods are, and how they contribute to the achievement of the learning outcomes of the study courses and the aims of the study programme. In the case of a joint study programme, or in case the study programme is implemented in a foreign language or in the form of distance learning, describe in detail the methods used to deliver such a study programme. Provide an explanation of how the student-centred principles are taken into account in the implementation of the study process.**

Since 2016, teaching and assessment methods used in study courses have been critically evaluated on the basis of information provided in study course evaluations, informal feedback from students and pedagogical competence development of academic staff involved in the implementation (staff regularly participate in training organised by the RSU Centre for Educational Growth, see Section 3.4.1 of the description).

The mapping of the StP carried out between 2017 and 2018 has contributed to a better alignment of teaching and assessment methods with the objectives and outcomes to be achieved of the StP, as a clearer understanding of these concepts has been established among lecturers. In recent years, there has been an increase in the proportion of study courses where the final assessment is cumulative, based on the evaluation of the student's performance during the semester. Accordingly, structured assignments for students to work on individually and in groups have been revised, refined and redesigned in line with the required volume of independent studies (70% of the programme).

It should be noted that students of AMSP Rehabilitation are medical practitioners with professional qualification acquired during the previous stage of education and experience in professional activities in rehabilitation and health care. Students choose to study in AMSP Rehabilitation because the professional experience stimulates a deeper interest in the field of rehabilitation or motivates them to pursue academic activities in the future. Therefore, the implementation of AMSP Rehabilitation is focused on the organisation of the study process and the methods used to promote student responsibility and a self-directed study process. At the beginning of study courses, information on the objective, content and plan of the study course, intended final assessment and planned assignments, schedule of interim reports and final reports, assessment criteria is provided. All information is available also in e-studies. Within the framework of assignments, students are given the opportunity to choose topics of interest (e.g. a clinical problem or a topical issue in the field of rehabilitation), and groups of students have the opportunity to plan their collaboration independently during the learning assignments. During the implementation of the study course, information is exchanged between students and teaching staff, clarifying and explaining issues arising during independent work as necessary, mutually agreeing on adjustments to the assignments or the study course plan (for example, the date of the interim or final report).

There are relatively few lectures in AMSP Rehabilitation, while the practical classes are mostly seminars, where students report, discuss and reflect on the results of their independent work and receive the necessary advisory support from the teaching staff. This approach to the

implementation of the study process as a whole is aimed at integrating the principles of student-centred teaching and learning into the study process. As several study courses of AMSP Rehabilitation have assignments that last for the whole course (semester), several lecturers (e.g. the StP Director, teaching staff involved in the course implementation or experts in the field) are invited for the individual or group interim or final reports. Direct feedback and dialogue between teaching staff and students is essential in these reports/seminars in order to identify strengths and weaknesses of the work done during a part of the assignment or the entire assignment, to adjust the following steps of action and to get the necessary support for students' independent work (e.g. additional consultations, additional theoretical material, etc.). As student groups are very diverse (more active, less active), the head of the study course or teaching staff usually make sure that everyone has their say in these conversations.

**3.2.4. If the study programme envisages an internship, describe the internship opportunities offered to students, provision and work organization, including whether the higher education institution/ college helps students to find an internship place. If the study programme is implemented in a foreign language, provide information on how internship opportunities are provided in a foreign language, including for foreign students. To provide analysis and evaluation of the connection of the tasks set for students during the internship included in the study programme with the learning outcomes of the study programme (if applicable).**

**3.2.5. Evaluation and description of the promotion opportunities and the promotion process provided to the students of the doctoral study programme (if applicable).**

**3.2.6. Analysis and assessment of the topics of the final theses of the students, their relevance in the respective field, including the labour market, and the marks of the final theses.**

In Section 3.2.2 of the description, the link between the choice of topics for students' Master's theses and the research directions defined by the DoR and RRL has already been explained, as well as the possibilities to participate in ongoing research projects (including thesis research) at DoR and RRL, as well as at RSU in general, or to independently choose a research topic of interest.

The analysis of the topics of the defended Master's theses outlines the following thematic blocks:

- translation of specific functioning assessment tools into Latvian and validation thereof (surveys on occupational rehabilitation issues; fluent, automated word naming and variable stimuli test, etc.);
- comparison of the content and psychometric properties of functional status assessment tools in the context of different clinical problems (brain tumours, swallowing disorders, etc.);
- evaluating the quality and effectiveness of different rehabilitation services (outpatient

physiotherapy services, inpatient stroke rehabilitation, rehabilitation services for people with unilateral lower limb amputations, etc.);

- implementing a family-centred approach for children with functional limitations;
- technology and innovation in rehabilitation.

The average assessment of Master's theses varies over time: in 2017, it was 8.3 (from 7 to 9), in 2018 – 7.6 (from 6 to 9), in 2019 – 7.8 (from 6 to 10), in 2020 – 6.7 (from 5 to 9) and in 2021 – 8 (from 7 to 9).

After the Master's thesis is defended, based on the discussions, assessment and recommendations of the defence commission, Master's students are invited to publish their research results at professional association conferences, local and international industry conferences, as well as to prepare scientific publications.

### **3.3. Resources and Provision of the Study Programme**

**3.3.1. Assessment of the compliance of the resources and provision (study provision, scientific support (if applicable), informative provision (including libraries), material and technical provision, and financial provision) with the conditions for the implementation of the study programme and the learning outcomes to be achieved by providing the respective examples.**

AMSP Rehabilitation is implemented using the generally available RSU resources: classrooms, library resources (e.g. subscribed databases), e-learning environment and its tools, and DoR resources (research equipment – gait analysis, accelerometers, etc.). The Faculty's financial base allows it to budget funds each year to attract visiting lecturers, support study visits and support research (e.g. the purchase of paid publications, the selection and purchase of specific data from various databases, equipment for studies and research, etc.).

RSU provides a sufficient base for integrating the latest scientific findings in health care, multidisciplinary collaboration in the study process and research support. For example, study visits to various RSU structural units – Medical Education Technology Centre, Institute of Occupational Safety and Environmental Health, RRL, Psychology Laboratory, etc. RSU also provides opportunities for students to participate in conferences and events organised by the University, such as RSU Research Week, RSU Student International Conference, guest lectures and thematic events.

In addition, the resources of cooperation partners of RSU Faculty of Rehabilitation (examples are mentioned in Section 3.1.4) are used for various study visits in the StP study courses (e.g. in the course Environment and Assistive Technologies, Work Capacity Assessment and Disability Prevention, Rehabilitation Multiprofessional Team, etc.) and for attracting visiting lecturers. During the period of the Covid-19 pandemic restrictive measures, the opportunity was taken to organise virtual visits, for example to the Vaivari Technical Assistance Centre.

A major challenge and driver for the integration of new technological solutions in the study process was the period of the Covid-19 pandemic restrictive measures, when the study process had to be reoriented very rapidly towards remote process. In spring 2020, students' and lecturers' own resources (computers, accessories, software, stable internet connection, etc.) played an important

role. The implementation of the study process was influenced by the skills to manage certain software and apps (Skype, Google tools, MS Teams, Zoom, etc.), as well as by the computer accessories such as a webcam, headphones, microphone. RSU in general responded very quickly to the current needs, identifying the needs of students and teaching staff in discussions at various levels, providing educational activities and briefings for teaching staff and students, as well as technological support for teaching staff and students, such as the provision of additional computer equipment, rooms for final examinations.

**3.3.2. Assessment of the study provision and scientific base support, including the resources provided within the framework of cooperation with other science institutes and higher education institutions (applicable to doctoral study programmes) (if applicable).**

**3.3.3. Indicate data on the available funding for the corresponding study programme, its funding sources and their use for the development of the study programme. Provide information on the costs per one student within this study programme, indicating the items included in the cost calculation and the percentage distribution of funding between the specified items. The minimum number of students in the study programme in order to ensure the profitability of the study programme (indicating separately the information on each language, type and form of the study programme implementation).**

It is planned to finance the study programme with Latvian as language of instruction and examination from the state budget and the funds of private and legal persons by setting the tuition fee in accordance with the state budget funding without social security in the amount of EUR 7335 per study year. Discounts on tuition fees are possible in accordance with internal regulatory documents. The number of students planned to reach in the two years of studies of the study programme is 31 students, with 16 students admitted in the first year of studies, and the number of students remaining unchanged during the 2<sup>nd</sup> year of studies. Such a number of students is optimal to ensure a high quality study process and so that the study programme can cover implementation and development costs. However, for the study programme with English as language of instruction and examination, costs of study programme implementation and development will be met if 22 students are reached in two years of studies, fee of tuition being EUR 7500 per study year.

The funding is used for staff remuneration, attraction of visiting lecturers, taxes, maintenance of IT infrastructure, purchase of equipment and facilities and expenditure on study visits. In addition to the direct costs of delivering lectures and conducting classes, the study programmes have to cover infrastructure maintenance costs (premises, IT solutions) and costs of other RSU common resources used in the study programmes (Student services, Library, organisation of the study process, grant to the Student Union and other support and administrative functions).

The study programme is implemented by the Department of Rehabilitation of the Faculty of Rehabilitation, Department of Health Psychology and Pedagogy and Health Management Lecturer Group of the Faculty of Public Health and Social Welfare, Statistics Unit, Department of Clinical Skills and Medical Technology of the Faculty of Medicine and the Unit for Continuing Education of Academic Staff of the Centre for Educational Growth. Remuneration of academic staff for the first

year of the study programme is planned at approximately EUR 29 000 for the study programme with Latvian as the language of instruction and examination, and approximately EUR 28 000 for the study programme with English as the language of instruction and examination.

Table 2. Cost of the Study Programme in Latvian

<b>Title</b>	<b>Outcome with the existing tuition fee</b>
Average revenue per student, EUR	6 735
Average cost per student, EUR	3 569
Academic staff, %	50
Resources of departments, %	2
Other direct expenditure, %	9
Students' clinical training and placement costs, %	4
Scholarship costs, %	35

Table 3. Cost of the Study Programme in English

<b>Title</b>	<b>Outcome with the existing tuition fee</b>
Average revenue per student, EUR	6 741
Average cost per student, EUR	3 791
Academic staff, %	61
Resources of departments, %	2
Other direct expenditure, %	0
Students' clinical training and placement costs, %	4
Scholarship costs, %	33

### 3.4. Teaching Staff

#### 3.4.1. Assessment of the compliance of the qualification of the teaching staff members (academic staff members, visiting professors, visiting associate professors, visiting

**docents, visiting lecturers, and visiting assistants) involved in the implementation of the study programme with the conditions for the implementation of the study programme and the provisions set out in the respective regulatory enactments. Provide information on how the qualification of the teaching staff members contributes to the achievement of the learning outcomes.**

AMSP Rehabilitation involves at least 15 lecturers with a doctoral degree who meet the conditions for the implementation of the programme. It should be noted that the lecturers with a doctoral degree represent different branches of science: medical and health sciences, social sciences (psychology, economics and education). This diversity is largely due to the interdisciplinary approach in the study process and the high-level integration of specific knowledge from different branches of science in the study process.

It can be said that some of the lecturers form the core of the StP and the other part is variable (visiting lecturers for some study course topics). The total number of lecturers in the StP varies (about 30 lecturers on average), as the number depends on whether the invited visiting lecturers can devote time to the AMSP Rehabilitation study courses in a given academic year. Some of the lecturers involved in the implementation of the StP are doctoral students or doctoral degree candidates.

During the period from 1 January 2017 to 1 October 2022, 22 lecturers of the Rehabilitation study programme participated in continuing education activities of the Centre for Educational Growth (CEG) attending more than 130 training activities of different content. In total, teaching staff of the StP Rehabilitation spent 2,678 academic hours on continuing education activities.

The teaching staff participated in the following CEG activities:

- Creating Animated Visual Study Materials;
- Reference Management Tool EndNote;
- Remote Group Work of Students Using the Miro Tool;
- Collaboration and Partnership Towards Professional and Sectoral Development: Local, National, Transnational;
- Creating Engaging and Interactive Classrooms through Active Learning Techniques;
- Digital Darwinism – What It Means for Us Each and Our Institution;
- Teaching in a Cross-Cultural Environment;
- Think Tank: How to Assess to Learn?;
- Creating Electronic Tests;
- Potential of Immersive Technologies for Efficient Learning Strategies;
- Processing of Photos for Visually Appealing Study Materials;
- Interactive Presentations and Real-Time Feedback in the Mentimeter Tool;
- Improvisation in Pedagogical Work;
- How to Turn the Complicated Into Easy to Understand? Interactive Learning Game “Cell”;
- The Potential of Conflict to Build Cooperation;
- Research Methodology and Statistical Processing of Data;
- Visualisation of Content in Presentations;
- Turnitin: How to Assess Students’ Papers in Higher Quality and More Effectively?;
- Assessment Approaches and Types of Examinations in Remote Studies;
- Creating Videos: Complex in a Simple and Short Way.

Summarising the information on teaching staff who are RSU alumni, it can be seen that 12 lecturers

have completed RSU study programmes (from one to three), while two lecturers are currently (in the academic year 2022/2023) studying in one of the programmes.

Further information on the academic careers and qualifications of teaching staff can be found in Section 3.4.2.

### **3.4.2. Analysis and assessment of the changes to the composition of the teaching staff over the reporting period and their impact on the study quality.**

Analysing the academic staff (elected teaching staff) involved in the implementation of AMSP Rehabilitation, it can be concluded that the changes in the composition of teaching staff are mainly due to attracting new teaching staff: graduates of the programme, doctoral students and doctoral degree candidates, rehabilitation experts from outside RSU. Cooperation with some of the initially invited lecturers has been terminated due to changes in the lecturers' personal considerations or based on the evaluation results of the study courses (for example, the head of the Human Resource Management study course has changed).

RSU doctoral students and doctoral degree candidates whose thesis topics are relevant and important in rehabilitation (e.g. Rūdolfs Cešeiko, Guna Semjonova, Darja Ņesteroviča, Līna Butāne), alumni of the study programme (e.g. Līga Savicka, Agnese Kārklīņa, Lelde Ģiga) and recognised rehabilitation professionals (Dace Stirāne, Jūlija Vasiļevska) are regularly involved in implementation of AMSP Rehabilitation.

Since 2016, several lecturers involved in the implementation of the StP have changed their academic status, for example, Guna Bērziņa and Dace Bērtule have been elected as Assistant Professors in the Department of Rehabilitation, Rūdolfs Cešeiko has defended his doctoral thesis and has been elected as a lecturer in the Department of Rehabilitation, Nora Jansone-Ratinika (CEG) has been elected as an Associate Professor, Daiga Behmane (Health Management Lecturer Group) has defended her doctoral thesis, Andrejs Ivanovs (Statistics Unit) has been elected as an Associate Professor.

Most of the lecturers involved in the implementation of AMSP Rehabilitation participate in scientific work, as evidenced by their active participation in events of importance to the field and in the organisation thereof, for example, the RSU Research Week, conference Society. Health. Welfare, RSU ISC, Latvian National Rehabilitation Congress, Baltic and North Sea Conference on Physical and Rehabilitation Medicine, etc., as also evidenced by publications in internationally cited scientific journals.

The activities and achievements of the academic staff are described on the RSU Research Portal PURE (available in [English](#) only).

### **3.4.3. Information on the number of the scientific publications of the academic staff members, involved in the implementation of doctoral study programme, as published during the reporting period by listing the most significant publications published in Scopus or WoS CC indexed journals. As for the social sciences, humanitarian sciences, and the science of art, the scientific publications published in ERIH+ indexed journals or peer-reviewed monographs may be additionally specified. Information on the teaching staff included in the database of experts of the Latvian Council of Science in the relevant field**



**of science (total number, name of the lecturer, field of science in which the teaching staff has the status of an expert and expiration date of the Latvian Council of Science expert) (if applicable).**

**3.4.4. Information on the participation of the academic staff, involved in the implementation of the doctoral study programme, in scientific projects as project managers or prime contractors/ subproject managers/ leading researchers by specifying the name of the relevant project, as well as the source and the amount of the funding. Provide information on the reporting period (if applicable).**

**3.4.5. Assessment of the cooperation between the teaching staff members by specifying the mechanisms used to promote the cooperation and ensure the interrelation between the study programme and study courses/ modules. Specify also the proportion of the number of the students and the teaching staff within the study programme (at the moment of the submission of the Self-Assessment Report).**

The Director of the StP is in contact with the head of each study course, while the head of the study course is in contact with the teaching staff involved in the implementation of the study course. Communication usually takes place during the study process planning phase (end of the academic year, beginning of a new academic year) and at the end of the study course (end of the semester) to discuss the study course process, successful and less successful aspects of the course, suggestions for changes in the content or organisation of the study course.

For example, an analysis of the initial process and results of the Effective Rehabilitation Programmes study course identified the need to better link the study course content with the knowledge acquired in the Basics of Finance Management study course. As a result of discussions, the heads of both study courses agreed on the following changes: to move the Effective Rehabilitation Programmes study course from the 2nd semester to the 3rd semester (starting from the academic year 2018/2019), and implement the Basics of Finance Management study course in parallel (starting from the academic year 2019/2020), thus achieving better student understanding of the practical application of financial management competences in planning and evaluating the effectiveness of rehabilitation services. For example, the Rehabilitation Organisation, Integration and Types of Services; Health Tourism and Marketing study course was originally a part of the 2nd semester, but was moved to the 1st semester (as of the academic year 2019/2020), when courses are implemented the learning outcomes of which provide in-depth theoretical knowledge of health care organisation and management, as well as of the principles of health care quality management and control, thus giving students an in-depth understanding of the context of health care and rehabilitation services in general.

Heads of study courses usually encourage a reflective conversation with students at the end of the study course for feedback and invite them to evaluate the course by completing study course evaluation questionnaires. Meetings of heads of study courses and teaching staff involved in the

implementation of the study programme are organised as necessary, thus providing an opportunity to share experience, coordinate the content of study courses or discuss changes required in the study process in order to best achieve the established study programme outcomes.

The ratio of the number of students and teaching staff in the study programme is: 39 students and 26 lecturers. The ratio of the number of students and teaching staff is 1.5.

# Annexes

III - Description of the Study Programme - 3.1. Indicators Describing the Study Programme		
Sample of the diploma and its supplement to be issued for completing the study programme	24.1_Diploma_and_Supplement_AMSP_Rehabilitation.pdf	24.1_Diploms_un_pielikums_AMSP_Rehabilitacija.pdf
For academic study programmes - Opinion of the Council of Higher Education in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions (if applicable)	AIP_pielik_prasiba_iznemta_no_AL.pdf	AIP_pielik_prasiba_iznemta_no_AL.pdf
Compliance of the joint study programme with the provisions of the Law on Higher Education Institutions (table) (if applicable)		
Statistics on the students in the reporting period	16_Anx_Statistics_Rehabilitation.pdf	16_pielik_Rehabilitacija_statistika_lv.pdf
III - Description of the Study Programme - 3.2. The Content of Studies and Implementation Thereof		
Compliance with the study programme with the State Education Standard	17.1_pielik_AMSP_Rehabil_atbilstiba_valsts_izglitiba_standartam_ENG.pdf	17.1_pielik_AMSP_Rehabil_atbilstiba_valsts_izglitiba_standartam.pdf
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard or the requirements for professional qualification (if applicable)		
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)		
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	18.1_Anx_Study_course_mapping_Rehabilitation.pdf	18.1_pielik_Stp_kursu_kartejums_Rehabilitacija.pdf
The curriculum of the study programme (for each type and form of the implementation of the study programme)	19_Anx_Study_Plan_Rehabilitation.pdf	19_pielik_Stp_planojums_Rehabilitacija.pdf
Descriptions of the study courses/ modules	20_Anx_Study_course_description_Rehabilit.pdf	20_pielik-St_kursu_apraksti_Rehabilitacija.pdf
Description of the organisation of the internship of the students (if applicable)		
III - Description of the Study Programme - 3.4. Teaching Staff		
Confirmation that the academic staff of the doctoral study programme includes not less than five doctors, of which at least three are experts approved by the Latvian Council of Science in the branch or sub-branch of science in which the study programme intends to award a scientific degree (if applicable)		
Confirmation that the academic staff of the academic study programme complies with the requirements specified in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions (if applicable)	24.7.1_Annex_Cert_compliance_AMSP_Rehabilitation_Akad_staff_AL_55.1.3.pdf	24.7.1_pielik_Aplieicinajums_AMSP_Rehabilitacija_akad_pers_atbilstiba_AL_55.1.3.edoc

# Audiology and Speech Therapy (42722)

Study field	<i>Health Care</i>
ProcedureStudyProgram.Name	<i>Audiology and Speech Therapy</i>
Education classification code	<i>42722</i>
Type of the study programme	<i>Professional bachelor study programme</i>
Name of the study programme director	<i>Ilze</i>
Surname of the study programme director	<i>Blūmentāle</i>
E-mail of the study programme director	<i>Ilze.Blumentale@rsu.lv</i>
Title of the study programme director	<i>Mg.sc.sal.</i>
Phone of the study programme director	
Goal of the study programme	<i>Train speech and language therapists with the highest level of professional Bachelor's education in health care by ensuring high quality professional higher education. Provide health, educational and social care institutions with qualified and competitive specialists - speech and language therapists. Ensure the acquisition of knowledge, skills and competences appropriate to the specialty of audiologist-speech therapist for professional activity in accordance with the needs of the national healthcare and rehabilitation system and the requirements of the professional standard for the audiologist-speech therapist.</i>
Tasks of the study programme	<p><i>Ensure high-quality and modern professional studies in the training of audiology and speech therapists.</i></p> <p><i>Provide with the medical and specialty-specific knowledge and skills required for carrying out professional work for the specialty of audiology and speech therapist, using modern educational methods.</i></p> <p><i>Provide knowledge and ensure the study process with quality teaching and methodological tools, using modern information technologies.</i></p> <p><i>Motivate and stimulate students for further professional or academic growth, research work and pedagogical contribution to the field.</i></p>

Results of the study programme	<p>1. Able to demonstrate basic and specialised knowledge required for the science sector of speech therapy and the profession of audiologist-speech therapist and understanding of this knowledge, as well as able to understand regularities.</p> <p>2. Able to demonstrate an evidence-based approach to dealing with communication, speech, language and swallowing disorders and take responsibility and initiative in carrying out the work of an audiologist-speech therapist individually, as part of a team or managing the work of other people.</p> <p>3. Able to carry out professional and research activities, as well as independently structure their own learning process in the chosen specialty, using the theoretical foundations and skills acquired during studies in the study programme "Audiology and Speech Therapy".</p> <p>4. Able to independently obtain, select and analyse information about communication, speech, language and swallowing processes and disorders and use it to plan own activities, take decisions and find creative solutions related to the possibilities and scope of assistance of the audiologist-speech therapist in both clinical and pedagogical settings.</p> <p>5. Able to participate in the development of the professional field of audiology and speech therapy by acquiring and extending theoretical and practical skills.</p> <p>6. Able to adapt to the dynamic transformation of the healthcare field by incorporating their professional knowledge, competence and skills to work in the provision of remote healthcare services, depending on the identified needs of a person or a group of people.</p> <p>7. Able to use the theoretical foundations and skills acquired during studies in the study programme "Audiology and Speech Therapy" to organise the healthcare service provided in such a way as to achieve maximum integration of a person in daily activities, respecting the individual level of functioning of the person.</p>
Final examination upon the completion of the study programme	National Examination, defence of the Bachelor's thesis

## Study programme forms

### Full time studies - 4 years - latvian

Study type and form	Full time studies
Duration in full years	4
Duration in month	0
Language	latvian
Amount (CP)	160
Admission requirements (in English)	Secondary education

Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	<i>Professional Bachelor's Degree in Health Care</i>
Qualification to be obtained (in english)	<i>Audiologist/speech therapist</i>

### **Places of implementation**

<b>Place name</b>	<b>City</b>	<b>Address</b>
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

### 3.1. Indicators Describing the Study Programme

**3.1.1. Description and analysis of changes in the parameters of the study programme made since the issuance of the previous accreditation form of the study field or issuance of the study programme license, if the study programme is not included on the accreditation form of the study field, including changes planned within the evaluation procedure of the study field evaluation procedure.**

Table 1. Changes in StP parameters

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period	Planned changes within the assessment procedure
1.	Study direction	-	-
2.	Title of StP	-	-
3.	Code according to the Latvian Education Classification	-	-
4.	Head of StP	-	-
5.	Scientific degree of the Head of StP	-	-
6.	Aim of StP	Updated.	-
7.	Tasks of StP	Updated.	-
8.	Learning outcomes to be achieved	Updated.	-
9.	Final examination upon the completion of StP	-	-
10.	Type and form of studies	-	-

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period	Planned changes within the assessment procedure
11.	Duration of implementation	-	-
12.	Language of implementation	-	-
13.	Volume of StP (CP)	-	-
14.	Admission requirements	-	-
15.	Degree to be awarded	-	-
16.	Qualification to be awarded	-	-
17.	Place of implementation	-	-

Table 1 (Changes in StP parameters) shows that study aims, tasks and learning outcomes have been revised and refined in accordance with the recommendations of Higher Education Quality Agency (HEQA). The learning outcomes of the study programme were evaluated and updated in accordance with the requirements of the qualification framework of Latvia (LCI/ECI) (Annex 18.1, Table 1) and the latest guidelines for drawing up the self-assessment report of the study direction of the Higher Education Quality Agency (HEQA) [Guidelines for the Preparation of the Self-Assessment Report of a Study Field](#) (20.09.2021). The learning outcomes of the study programme were mapped in relation to the results of study courses and reflect the conformity of the content of study courses with the objectives of the study course and the results to be achieved (Annex 18.1, Table 2).

### **3.1.2. Analysis and assessment of the study programme compliance with the study field. Analysis of the interrelation between the code of the study programme, the degree,**



**professional qualification/professional qualification requirements or the degree and professional qualification to be acquired, the aims, objectives, learning outcomes, and the admission requirements. Description of the duration and scope of the implementation of the study programme (including different options of the study programme implementation) and evaluation of its usefulness.**

The name of the study programme, the degree to be acquired, professional qualification or degree and professional qualification, aims, objectives, learning outcomes and admission requirements of the study programme are interrelated.

The study programme “Audiology and Speech Therapy” corresponds to the study direction “Health Care”, degree to be obtained – professional Bachelor’s degree in Health Care and professional qualification of an audiologist/speech therapist. The code “42722” of the study programme describes the level of higher education and compliance with the study direction “Health Care”. The first part of the code “42” denotes second level professional higher education (fifth level professional qualification and professional bachelor's degree) or second level professional higher education (fifth level professional qualification), to be implemented after completing general or professional secondary education. Study duration in full-time studies is four years, compliance with level 6 of the European Qualifications Framework (EQF) / Latvian Qualifications Framework (LQF) has been established in [Cabinet of Ministers Regulation No. 322](#) (only in Latvian). The second part of the study programme code “722” according to Cabinet of Ministers Regulation No. 322 is “Medical services”: “72” refers to the thematic area of education “Health Care”.

The aim of the study programme “Audiology and Speech Therapy” is to ensure high-quality professional higher education preparing audiologists/speech therapists with the level of professional Bachelor’s higher education in health care; to take care of the preparation of qualified and competitive professional audiologists/speech therapists for work in health education and social care institutions; to ensure mastering of knowledge, skills and competences relevant to the speciality of an audiologist/speech therapist for professional activity in accordance with the needs of state health care and rehabilitation system and the requirements of the profession of an audiologist/speech therapist. To achieve the aims, the content and learning outcomes of study courses of StP “Audiology and Speech Therapy” provide knowledge, practical skills, and competences necessary for the professional qualification of an audiologist/speech therapist.

The objectives of the study programme “Audiology and Speech Therapy” are subsidiary and are consistent with the objectives of the study direction “Health Care”, which is based on the RSU Development Strategy and vision years 2022-2027, ensuring education, experience and qualifications based on research and professional practice. Further directions of operation of the study programme are related to the provision of quality education based on studies and professional experience, the introduction of innovative learning methods, technologies in the study process and the promotion of co-operation.

Students undergo both general medical education and theoretical basic field-specific courses during their studies, as well as field-specific professional specialisation courses corresponding to [level 6 of the LQF/EQF](#) (link only in Latvian). After graduating from the study programme, using the theoretical foundations and skills acquired, the audiologist/speech therapist shall be able to perform professional activities, formulate and analyse information, problems and solutions, explain and discuss topics with both specialists and non-professionals in the acquired profession of audiologist/speech therapist, performing work individually and in the team.

The type and form of study programme “Audiology and Speech Therapy” is full-time regular studies (in full-time studies not less than 40 per cent of contact hours), the amount of the programme is 160 CP (conform to Cabinet of Ministers Regulation No. 305). The compulsory structure of the programme consists of: study courses (theoretical and professional specialisation courses of the field), practice (in the amount of 26 CP), national examination with the development and defence of Bachelor's thesis. The selection of study courses, the amount and content of study courses, as well as the content of the practice have been developed and improved in accordance with the professional degree and professional qualification to be obtained in accordance with the standard of the profession of audiologist/speech therapist (22.04.2005). The duration of StP is 4 years, 0 months.

During studies students master both general education and industry-specific theoretical basic courses, as well as industry-specific professional specialisation courses. In the first year of studies, they obtain basic knowledge in clinical medical study courses, which provide basic understanding of the structure and general functioning of a human, while in the second, third and fourth years of studies students obtain in-depth knowledge in professional study courses and obtain clinical experience by implementing clinical placement in the largest Latvian clinics and rehabilitation centres. Acquired theoretical knowledge, practical skills and experience acquired during studies help develop the analytical skills and clinical thinking necessary for an audiologist/speech therapist to perform his/her further professional activities, ensuring the assessment, diagnosis, correction of patients' communication abilities, speech/language, phonation and swallowing disorders, therapy and rehabilitation for persons of any age, with communication, speech, language (spoken and written language), voice, hearing, swallowing and other disorders caused by different aetiology.

One of the learning outcomes is the ability to adapt to a dynamic transformation of health care by incorporating their professional knowledge, competences, and skills into the provision of remote health services. The events of recent years have brought valuable experience and demonstrated the need to improve the programme to implement the learning outcomes on the provision of remote work. During the previous accreditation, there were no issues related to the need to provide remote services. In the last few years, the idea of the need, opportunities and quality of remote services have changed significantly. During the study process, acquisition of students' knowledge and skills for work for the provision of remote health care services is ensured within the framework of study courses (for example, study course “Didactics”). This promotes not only the preparation of modern specialists, but also the future availability of specialists.

Admission requirements correspond to the admission regulations approved by the RSU Senate for the respective academic year as well as external regulations. In accordance with Paragraph 3 of Regulations of the Cabinet of Ministers (CM) No. 846 “Regulations Regarding the Requirements, Criteria and Procedures for Admission to Study Programmes” of 10 October 2006, each year by 1 November, the rules for admission to study programmes (hereinafter – admission regulations) for the next academic year should be drawn up, approved and published (also on the Internet home page).

Applicants of the study programme “Audiology and Speech Therapy” are enrolled according to the competition results, which are made up of the centralised examination (CE) assessments in mathematics, Latvian language, foreign language and the annual grade in biology or life sciences.

The overall assessment of the admission results is composed of:

- 20% of the total assessment is the CE assessment in mathematics;
- 40% of the total assessment is the CE assessment in Latvian language;
- 20% of the total assessment is the CE assessment in a foreign language or an international

testing institution's examination document;

- 20% of the total assessment is the annual grade in biology or life sciences.

Additional requirements: objective structured clinical examination (OSCE), in which erudition obtained by the application during his/her life and general knowledge of medicine and health care is tested in writing.

Overall, the strategic aim of StP "Audiology and Speech Therapy" is to provide, in accordance with the RSU's strategic main aim, innovative knowledge, skills and competence based education, ensuring mastering of knowledge, skills and competences relevant to the speciality of an audiologist/speech therapist, which is necessary for professional activity in accordance with the needs of the state health care and rehabilitation system and the requirements of the profession of an audiologist/speech therapist.

The content of the studies corresponds to aims and tasks of the study programme providing medical and specialty-specific knowledge and set of skills that an audiologist/speech therapist requires for performing his/her professional activity. This knowledge and set of skills is mastered using modern education methods.

The study programme provides knowledge and ensures the study process with quality educational and methodological aids using modern information technology.

The study programme motivates and stimulates students for further professional or academic growth, research work and pedagogical contribution to the sector.

The study content matches the requirements of the degree and professional qualification. Study content in the study programme "Audiology and Speech Therapy" has been developed in accordance with CM Regulations of the Republic of Latvia No. 512 "Regulations Regarding the State Standard for Second-Level Professional Higher Education" (available only [in Latvian](#)), as well as in accordance with the standard for the profession of an audiologist/speech therapist (available [only in Latvian](#)), ESLA research of the guidelines on Speech and Language Therapy Education in Europe (available only [in English](#)) and RSU Development Strategy 2022-2027 (available [in Latvian](#), [in English](#)).

### **3.1.3. Economic and/ or social substantiation of the study programme, analysis of graduates' employment.**

The improvement of the quality of studies is unimaginable without the analysis of the results of surveys of students, graduates and employers. At the end of each study course, students are invited to complete study course assessment questionnaires. Responsiveness among students of StP "Audiology and Speech Therapy" is evaluated as quite high and stable. Between 2018 and 2021, responsiveness ranged from 60% to 69% (the spring semester of 2019 was an exception - 38% of students participated in the survey (see Annex 21.1)).

Between 2018 and spring 2021, the average assessment of the quality of study courses was between 3.51 and 3.57 (on a scale from 1 to 4), which is evaluated as high assessment of the quality of study courses, in autumn 2021 the average indicator reached 3.64 (on a scale from 1 to 4), which is evaluated as very high quality assessment (see Annex 21.2).

At the end of each study process, graduates evaluate the quality of the study programme "Audiology and Speech Therapy" by completing a study programme assessment questionnaire,

through which the opinion of graduates is learned. Responsiveness among graduates of StP “Audiology and Speech Therapy” is average and variable. Between academic years 2014/2015 and 2017/2018, responsiveness ranged from 40 to 100%, in academic year 2018/2019 responsiveness among graduates fell to 10%. The following measures were taken to promote the responsiveness of graduates in completing questionnaires:

- additional reminders and informative descriptions have been sent about the necessity of completing the questionnaire, which makes it possible to improve the quality of the programme in the future;
- during face-to-face (formal and informal) and remote meetings, the importance of the opinion of graduates for the improvement of the programme was discussed;
- the need to remind students that they should provide their assessment, reflections and recommendations on the content and outcomes of the programme was discussed with lecturers;
- at the end of semester, RSU organises various informative reminders.

In the last two years, responsiveness to completing surveys has improved significantly reaching 80% to 100%.

Both study course assessment questionnaires and study programme assessment questionnaires are analysed, these assessments contribute to the improvement of the quality of study courses and programme.

As a result of the analysis:

- feedback on the assessment of study courses is provided to students;
- the results of the survey are discussed with the heads of study courses and the lecturers involved;
- where necessary, the assessment results are discussed with the heads and lecturers of responsible structural units;
- results are analysed in the StP Quality Council (for example, on 20 January 2020, matters regarding the results of the survey on the study programme and admissions statistics of StP “Audiology and Speech Therapy” in 2020, as well as the need for improvement of the study course “Sign Language” and “Neurology”, etc. were examined at the meeting of the Study Quality Council).

Part of currently implemented changes to the study process and the study planning have been made based on feedback received on the quality of study courses and the study programme. Many study courses have been improved, expanding the content of study courses has facilitated review of several study courses and review of the content of study courses, for example, the content of the study course “Speech Therapy”. As a result of several years of improvement, both its content and visual design have been changed, two study courses “Language Disorders in Children” and “Speech Sound Disorders of Different Origin” have been created instead of one course. The study course was improved during the modernisation of RSU study programmes. The improvement of the study course resulted in the creation of an audio and video card index, which is supplemented with new examples of speech and language. It is used in the study process on a daily basis. This fosters the task of StP: to provide high-quality and up-to-date professional studies in the preparation of audiologists/speech therapists.

In 2017, the RSU Alumni Association in cooperation with RSU Study Department and RSU Centre for Educational Growth developed a questionnaire for graduates which was published on the RSU website in autumn 2019. In total, 31 graduates of the professional Bachelor’s study programme

“Audiology and Speech Therapy” have completed the questionnaire: 20 of them graduated from StP in the past six years; 27 or 87%, which is a high employment rate, work in the industry entirely related to the study programme. 65% of graduates work in Riga, 35% – outside Riga. To promote rotation of students in different regions of Latvia in the next five years, one of the StP development tasks is to expand the possibilities for the implementation of clinical placement in the territory of Latvia, promoting cooperation with employers and inclusion of new placement sites in the study process (see Annex 4.1 “Development Plan of the Study Programme”).

When expressing their opinion on preparedness and skills of audiologists/speech therapists employers have noted that students’ theoretical and practical preparedness is good when they start professional activity after graduating from the StP “Audiology and Speech Therapy”. Employers surveyed noted that scientific research activity and self-initiative of professionals in the field of scientific research should be promoted. To follow developments in the labour market and the sector and to improve the preparedness of students to labour market requirements, the StP development plan envisages conducting surveys which will help to learn the opinion on what should be promoted in the study process (see Annex 4.1, Paragraph 1.7), as well as to attract visiting lecturers to expand research and innovation potential (see Annex 4.1, Paragraph 4.1).

Overall, it can be concluded that there is successful cooperation with graduates:

- the opinions expressed in the graduate surveys are analysed;
- a representative of graduates participates in the work of the Quality Council of StP “Audiology and Speech Therapy”.

Cooperation with employers is also regular and productive:

- employers are involved in the work of the Quality Council of the StP “Audiology and Speech Therapy” – the representative of employers, together with other members of the StP Quality Council, participates in the discussion of topical matters related to the study process;
- employers’ opinions are studied by analysing “Employer questionnaire” information;
- employers are involved in the national degree examination and Bachelor’s thesis defence board.

In analysing the employment and accessibility of the audiologists/speech therapists as functional specialists in Latvia, data provided by the Health Inspectorate Registry Division for the period up to 27.01.2021. were used. The data show that a total of 145 audiologist/speech therapist services are available in various municipalities and cities of Latvia.

*Figure 1. Employment of audiologists/speech therapists by city/county (health Inspectorate data)*



needed in the preparation of audiologists/speech therapists.

On the basis of the results obtained, it can be concluded that further improvement of the study process and promotion of acquisition of practical skills in clinical placement sites should be continued. In cooperation with the Latvian Association of Audiologists and Speech Therapists, the situation related to the skills and competences to be acquired during studies, possibilities for improvement both during studies and after graduation of the institution of higher education should be studied (see Annex 4.1, Paragraph 1.7). Cooperation with employers should continue, involving them both in the study process and in the StP Quality Council (see Annex 4.1, Paragraph 7.1, 7.2).

**3.1.4. Statistical data on the students of the respective study programme, the dynamics of the number of the students, and the factors affecting the changes to the number of the students. The analysis shall be broken down into different study forms, types, and languages.**

The interest to the study programme has grown considerably in the last four years compared to the time before 2018. The average number of applications submitted for state-funded study places was eight applicants per state-funded study place (see Annex 16).

When analysing the number of applications during five summer admissions, it can be concluded that positive dynamics are observed in the selection of StP “Audiology and Speech Therapy” as a priority programme. 40 applicants indicated the programme as a priority in 2018, and 66 applicants indicated the programme as a priority in 2022.

*Table 2. Number of applications for study places in StP over the last five years*

<b>Year</b>	<b>Number of applicants for StP state-funded study places</b>	<b>Number of applicants for StP paid places</b>	<b>Applications, in which StP “Audiology and Speech Therapy” state-funded study place is indicated as priority 1</b>
2018	96	32	40
2019	161	61	55
2020	165	49	55
2021	168	49	52
2022	167	54	66

The number of students admitted has also increased over the past three years, which was 35 students per year on average, an average of 11 students chose self-funded studies. Following talks with students, it can be seen that some of the students who cover their studies from their own resources have found an opportunity and entered into agreements with the local government of their place of residence for its involvement in paying for the studies. After graduation, new specialists start working according to their place of residence. In recent years, opportunities have been sought and new agreements have been entered into to attract audiology and speech therapy

specialists working in different regions of Latvia to ensure clinical placement. The work started should continue. This will facilitate the possibility for prospective specialists to gain clinical experience at their place of residence and to take up work in the region after graduation, thereby facilitating the availability of audiologists/speech therapists in different regions of Latvia (see Annex 4.1, Paragraph 4.1, 4.3).

*Figure 1. Availability of audiologists/speech therapists in regions of Latvia (data from 2010 to 2021, 175 audiologists/speech therapists in total)*



When analysing the breakdown of the number of students by year of studies, it can be concluded that the largest drop-out of students is in the first year of studies. When analysing student data on the first year of studies, it can be seen that in academic years 2016/2017 and 2017/2018 the drop-out of first year students was 10-11 students. Over the next two years, student drop-outs rose sharply to 19 and 17 students, respectively (possibly due to the remote study process). In the past two years, student drop-outs in the first year of studies has fallen again to 12 students.

Three factors that could influence the outcome should be mentioned: first, the participation of students in the course “Introduction to Professional Studies and Research” is promoted. During the study course, a meeting of senior students with first year students are organised, and senior students share their experience regarding the study process, while first year students have the opportunity to receive answers to questions regarding studies in StP “Audiology and Speech Therapy” directly from them.

Second, in the study course “Introduction to Professional Studies and Research” students have the opportunity to meet, ask questions about the Audiology and Speech Therapy speciality and the specifics of studies to industry representatives, association’s management representatives and the head of the study programme. In talks with first year students about the study process, it was noted that information about the details of studies, study courses has helped to be more serious about studies. The started cooperation needs to be continued and further improved in the coming years



(see Annex 4.1, Paragraph 4.2, 4.3).

Third, during studies cooperation is promoted, meetings are organised with the heads of study courses from departments implementing the study course, where student drop-outs for academic failure is highest. When analysing student drop-outs due to academic failure, indicators have improved significantly over the last four years. In academic year 2018/2019, the number students expelled in the first year of studies was 16 students, in academic year 2019/2020 – 10 students, and in academic year 2020/2021 – six students, in academic year 2021/2022 – five students.

The number of graduates has been on a negative trend over the last three years, i.e. declining (24, 18, 15, respectively), while in 2021/2022 the number of graduates has a positive dynamic – 17 graduates. In academic years 2020/2021 and 2021/2022, overall, there is a tendency that the number of students decreases proportionally as the year of studies increases. This may have been influenced by the situation that arose due to the Covid-19 pandemic and the need for remote studies, as the remote organisation of professional study courses and partial clinical placement affected students' choice of future studies.

### **3.1.5. Substantiation of the development of the joint study programme and description and evaluation of the choice of partner universities, including information on the development and implementation of the joint study programme (if applicable).**

## **3.2. The Content of Studies and Implementation Thereof**

### **3.2.1. Analysis of the content of the study programme. Assessment of the interrelation between the information included in the study courses/ modules, the intended learning outcomes, the set aims and other indicators with the aims of the study course/ module and the aims and intended outcomes of the study programme. Assessment of the relevance of the content of the study courses/ modules and compliance with the needs of the relevant industry, labour market and with the trends in science on how and whether the content of the study courses/ modules is updated in line with the development trends of the relevant industry, labour market, and science.**

The professional Bachelor's study programme "Audiology and Speech Therapy", with a degree in Health Care to be obtained and an audiologist/speech therapist qualification, has four years of full-time studies.

Each year of study consists of two semesters, each concluding with an examination period during which the knowledge, skills and competences acquired by students are examined and evaluated. According to Cabinet Regulation No. 305 "Regulations regarding the State Standard for Second level Professional higher Education", students must obtain 160 credit points/240 ECTS during the study programme.

The content of STP "Audiology and Speech Therapy" consists of study courses, clinical practice,

research paper and national examination (semester papers, Bachelor's thesis and advocacy).

Distribution of StP content (160 KP/240 ECTS): 20 KP/30 ECTS general education study courses including theoretical humanities and social sciences courses (Philosophy and Medical Ethics, Economic and Business Fundamentals, etc.); 36 KP/50 ECTS field theoretical basic courses and information technology courses, which provide students with the knowledge, skills and abilities that are necessary and are the basis for the acquisition of professional specialisation courses (Normal Physiology and Neurophysiology, Latvian Language Culture, etc.); 60 KP/90 ECTS professional specialisation courses of the field, which provide students with in-depth knowledge for the acquisition of the profession of audiologist/speech therapist, specialist knowledge, skills and competences in the profession in accordance with the standard of the profession of audiologist/speech therapist (language disorders in children, speech rate and pace disorders, etc.); 26 KP/39 ECTS clinical practice during which students apply acquired knowledge and skills in the clinical environment, acquiring the necessary competencies in the profession of audiologist/speech therapist; 6 KP/9 ECTS free-choice courses, which also include a compulsory elective study course and a 12 KP/18 ECTS National examination, of which Bachelor's thesis is designed and defended.

Linking of the objective, tasks and deliverables of the StP with study courses shall be implemented by integrating the results to be achieved by the StP into the achievable results of each study course and defining the knowledge, skills and competences to be acquired in study courses. Study courses provide for the acquisition of theoretical knowledge and skills in the form of lectures, face-to-face classes, clinical practice and independent work of students. Assessment of study course acquisition provides an opportunity to ascertain the achievements and results of students in the acquisition of theoretical and practical knowledge of study courses at the level of individual courses, and the StP altogether. The National examination is the basis for assessment of the results to be achieved by the StP for each student individually. The study courses and clinical practices included in the StP ensure the achievement of StP objectives according to [LQF/EQF level 6 \(link only in Latvian\)](#).

To ensure the StP management process and to facilitate analysis of the content and results of study courses and conformity assessment for StP objectives, tasks and results, StP mapping is performed (Annex 18.1, 18.2). In accordance with the guidelines "Conformity of RSU study programmes with the quality assurance of Standard and guidelines in the European higher Education area (ESG) Part 1" (Annex 23.1) an annual review process of STP and study direction is performed, regulated by a decree of the Rector or instructions of the Board of studies and the quality, results and recommended changes of StP are evaluated in accordance with the latest trends and market requirements.

The content of study courses is complementary and sequential and provides an opportunity to acquire the knowledge, skills and competences necessary for the speciality of the audiologist/speech therapist. Study courses and their content comply with the needs of the relevant industry, labour market and science trends. The content of study courses is reviewed, improved and supplemented every year. This approach is fostered by the RSU quality mechanism, feedback from teaching staff and students.

During the first years of studies, students acquire the clinical medical knowledge both on the structure and functioning of a human as a whole (in the course "Anatomy and Histology", "Normal Physiology and Neurophysiology", etc.) and basic knowledge on anatomy and physiology of the mouth, throat and ear, which is necessary for the specialty of an audiologist/speech therapist. For example, in the first year of studies students have the study course "Normal Physiology and Neurophysiology", where they learn the basic principles of ear physiology and sound conduction, which are the basis for future study courses. Based on the acquired knowledge, students study in-

depth ear abnormalities and diseases in the ear in the course "Otolaryngology for Audiologists/Speech Therapists" and in the third year the study course "Audiology and Psychoacoustics" provides the basis for professional competence in the field of hearing disorders. In the course "Didactics", students acquire theoretical knowledge and practical skills about the organisational forms and principles of their work, cover questions of teaching theory, content and choices of methods.

As early as the first year of studies, students acquire skills not only for on-site work, but also become acquainted with the specificities of remote work and the possibilities for telepractice, which became particularly topical in the last two years of studies, but it previously was and still is important for the professional activity of an audiologist/speech therapist in general. In the Bachelor's thesis from academic year 2020/2021 "The implementation of telepractice in Latvia during the Covid-19 pandemic: speech-language therapist survey" it was concluded that of 106 respondents, 52% used telepractice, 98% of them started using telepractice in the past year. The mastering of remote working methods and specifics in the first year of studies contributes to ensuring the professional needs of students and guaranteeing the availability of the service in the future.

In the second year of studies, students start taking industry specific study courses, which help to understand different developmental and functional disorders, provide an additional understanding of the specificity of work of the audiologist/speech therapist and the diversity of disorders; as well as study courses that provide knowledge of the language field in general, for example, "Developmental Psychology for Children With Functional Disorders", "Special Pedagogy for Children With Functional Disorders", "Basics of Latvian Sign Language" and "Culture of the Latvian Language, Linguistics". Theoretical knowledge and practical skills acquired in study courses are successfully integrated by selecting and performing research work within the scope of course papers and Bachelor's theses. In 2021, a study "The comparison of fricative [s] and [z] spectrograms and oscillograms in the pronunciation of 4 and 5 year old children" was conducted as part of a Bachelor's thesis, where a lecturer of the Language Department cooperated with an audiology and speech therapy student.

The third and fourth years of studies mainly have study courses related to the speciality of an audiologist/speech therapist, in which students acquire knowledge and practical skills in working with children and adults with congenital and acquired functional disorders. During studies, students also acquire the knowledge and practical skills necessary for daily work, such as knowledge of first aid and emergency assistance, limitations, assessment and classification of functional abilities, etc.

In the survey of graduates "Study programme survey results", the assessment of students regarding the provision of placement for the achievement of learning outcomes from the academic year 2016/2017 to academic year 2021/2022 shows that almost 100% of students believe placement ensures the achievement of learning outcomes. Only two students from all who provided the information were not satisfied with the provision of placement.

The subjects of Bachelor's thesis are selected by students according to the field of professional activity of interest, the selected topics are up to date, the results obtained are practicable and provide their contribution to the Audiology and Speech Therapy sector and development of the field as a whole. For example, translations of different instruments: "Verification of the Reliability of the Latvian Translation of the Holden Communication Scale", "Reliability of the Questionnaire for the Assessment of Technical Aids for Alternative and Augmentative Communication: Pilot Study", "Verification of the Reliability of the Latvian Translation of Cognitive-Communication Checklist for Acquired Brain Injury". Various literature reviews of communication, speech and language therapy methods and their effectiveness: "Effects of Neuromuscular Electrical Stimulation on Stroke Patients

with Oropharyngeal Dysphagia”, “Commonly Used Treatment Methods in Patients after Stroke with Non-Fluid Aphasia”, etc.

Students present their research papers as part of the RSU International Science Conference, such as: “The Hard Cleavages of the Palate with the Cleavage of the Soft Palate and the Correlation of Speech Disorders.”

Graduates, whose Bachelor theses have earned the highest ratings, present their works to the Association of Audiologists and Speech Therapists, thus promoting the presentation of the latest findings, information and research results to members of the Association.

It is also important to note the professional, academic and scientific experience of the teaching staff involved in the programme. Example: One of the academic staff as first in Latvia acquired and used an eye-guided device for communication (Tobi), the academic staff then shares her knowledge through a study course “Introduction to Alternative and Augmentative Communication”, allowing students to practically learn the operation of the device and involving students in an in-depth process of learning new technologies not only during RSU studies, but also in other seminars.

**3.2.2. In the case of master’s and doctoral study programmes, specify and provide the justification as to whether the degrees are awarded in view of the developments and findings in the field of science or artistic creation. In the case of a doctoral study programme, provide a description of the main research roadmaps and the impact of the study programme on research and other education levels (if applicable).**

**3.2.3. Assessment of the study programme including the study course/ module implementation methods by indicating what the methods are, and how they contribute to the achievement of the learning outcomes of the study courses and the aims of the study programme. In the case of a joint study programme, or in case the study programme is implemented in a foreign language or in the form of distance learning, describe in detail the methods used to deliver such a study programme. Provide an explanation of how the student-centred principles are taken into account in the implementation of the study process.**

The study programme amounts to 160 credit points/240 ECTS. The amount of one credit point is the student load of 40 academic hours. Within one credit point, the amount of contact hours is between 30% and 40%, the remaining load is the student's own work. The description of each study course includes the organisation, tasks and evaluation criteria of the independent work. E-learning environment is used for communication and information of students, submission of independent work, provision of feedback.

The implementation of the study programme shall be ensured by the dean of the RSU Faculty of Rehabilitation, the Department of Rehabilitation (DoR) and other RSU Cathedrums, inviting the staff who ensures the learning of study courses of the Audiologopedy Programme (from rehabilitation centres, outpatient medical treatment institutions, etc.). The acquisition of professional study

courses are ensured by practicing Audiologopedy specialists who combine their practical experience with academic work in the RSU. The studios are held in RSU lecture rooms and RSU clinical bases. Clinical practice is implemented in medical treatment and special educational institutions.

Studies take place both face-to-face and remotely, and different teaching methods are used in the study process. Study process is implemented mostly as interactive lectures, practical classes or seminars and independent work of students. Advanced technologies available at RSU are used in both lectures and classes.

Both lectures and classes use modern technologies available in the RSU: E-learning environment, virtual communication environment, Panopto recording system, simulation environment (Annex 23.3). During classes, various free-access and paid-for applications are used, which provide students with the opportunity to learn or supplement knowledge in the field to be learnt and academic performance in achieving the content of the lesson, the results of the study course and STP results and a more modern study process in general. For example: Pro Metronome-Tempo, Beats (used in speech rhythm tasks, patients with dysartry), Dysphagia Training (tasks used to activate the structures involved in swallowing), TD Snap, Snap Scene (providing alternative communication), voice recorder, etc.

In implementing the practical planning of the study programme, a student-centred, structured, social study process is followed, self-motivated studies of students are promoted. Cooperative studies of students in groups and cooperation while learning are encouraged. For example, in the study course “Speech Sound Disorders of Different Origin” students are required to perform certain tasks in small subgroups and develop and present the work of the group. Much of the studies are dedicated to learning the practical skills and competences and take place in a clinical setting. Lectures, classes (seminars, practical classes, laboratory work), discussions, individual work and group work take place in the course of the study programme. The study process is planned and designed to promote a flexible study process that provides greater choice, convenience and personalised learning according to students’ abilities and needs. For example, in the study course “Neurologically Based Communicative Disorders, Course Paper” students can study, analyse posted materials, perform certain tasks at a time that is convenient to them, in the selected scope, and at a learning rate that is tailored to them.

Several study courses (“Language Disorders in Children”, “Speech Sound Disorders of Different Origin”, etc.) use the learning strategy that involves a student’s independent preparation for a specific class (flipped learning classroom) to encourage students’ self-learning. Even before the class, students become acquainted with materials in e-studies, visual aids, perform certain tasks in a convenient place and at a convenient time, and when they come to the class, the knowledge acquired by the student through self-learning is further discussed and practically used in performing certain tasks. The learning material is learned in detail by discussing it – it also provides an opportunity to discuss it more actively.

During lectures, lecturers provide students with theoretical knowledge in the relevant study course. During classes, students learn the practical application of theoretical knowledge, both by working practically and by analysing different clinical cases and situations. At seminars, students discuss their understanding of theory, link it to past experiences and practice while developing problem-solving skills. Individual work prevails in research work on course papers and Bachelor’s theses, group work prevails in practical classes, research work in study courses. One of the most effective methods, which encourages students to use knowledge and find the necessary literature in internet resources, is the independent (cooperative) work of a student or group of students and presentation of the results of independent work. After presenting the results of independent work, students

discuss, express their thoughts and opinions, as well as students acquire the ability to speak publicly and present their work during the study process. Feedback – questions, answers, discussions, talks – is an important aspect of the practical implementation of the study programme. Placement is a mandatory part of the implementation of the study programme. During placement, students develop their practical skills necessary for the professional qualification of an audiologist/speech therapist.

The academic staff involved in the programme performs the methodological provision of the study process, supplement the methodological materials in electronic form so that they are available in the electronic system of the University. The number of video lectures available to students, the number of audio recordings, videos with practical skill demonstrations, etc. has increased rapidly. Academic staff and support staff of the study programme develop their skills in training courses organised by the RSU in the use of e-learning environment and e-resources, as well as in other courses related to the study process organised regularly by the PIC in cooperation with the IT department.

Both formative and summative assessment is used in the studies. Formative assessment takes place during everyday study process, when students are asked control questions or take tests during classes, as well as by discussing the independent works of students. Summative assessment takes place at the conclusion of each study course as a test or examination. Summative assessment tests are organised in a written form (in paper format or electronically) or as oral discussions. At the conclusion of studies, the student selects a topic for his or her Bachelor's thesis according to his or her interests, writes and defends it at the end of studies.

During study courses, written and oral examinations (test work, seminars, individual and group work assessments) are used for examining students' knowledge. The programme closes with national degree examinations, which include development and defence of a Bachelor's thesis and a qualification examination. Study subject assessments are recorded on the examination and test form developed by RSU, recorded in students' electronic record books, as well as are appended to personal files of students. Student achievements are analysed on a regular basis.

A national degree examination consists of a test of theoretical knowledge – the choice of answers for the assessment of students' theoretical knowledge – and a demonstration of practical skills – analysis of clinical cases, examination results, audio recordings. The national degree examination is evaluated by the head of the National Examination Board and the composition is approved for each relevant academic year and work in accordance with the RSU guidelines. Representatives of employers and professional associations are involved in the National Examination Board and represent more than 50% of the Board. The chairperson of the National Examination Board is a representative of the employers or a professional association.

An essential condition for the functioning of the study programme is the establishment of the programme management system and its quality assurance system. The quality assurance of the Audiology and Speech Therapy study programme is based on an annual analysis and evaluation of the content of the study programme in the units implementing the programme and in the meetings of the RF Council; analysis and control of the study process carried out by regular analysis of study content, quality, results of student surveys, etc.

**3.2.4. If the study programme envisages an internship, describe the internship opportunities offered to students, provision and work organization, including whether the higher education institution/ college helps students to find an internship place. If the study programme is implemented in a foreign language, provide information on how**

**internship opportunities are provided in a foreign language, including for foreign students. To provide analysis and evaluation of the connection of the tasks set for students during the internship included in the study programme with the learning outcomes of the study programme (if applicable).**

The study programme “Audiology and Speech Therapy” includes a clinical placement of 26 CP / 39 ECTS. The tasks set for clinical placement are related to the learning outcomes to be achieved in the study programme, and the study courses implemented in the relevant year of studies, the content thereof – theoretical knowledge and skills learned during lessons. Clinical placement starts in the 2<sup>nd</sup> year of studies and continues in of the 3<sup>rd</sup> and 4<sup>th</sup> years of studies. The organisation of clinical placement is regulated by the Clinical Placement Regulations of the Faculty of Rehabilitation and a description of the progress of clinical placement in StP “Audiology and Speech Therapy”.

During clinical placement, students practically use the knowledge and practical skills obtained in study courses. Clinical placement is implemented in institutions, which are in contractual relationships (with remuneration and gratuitous) with RSU and all clinical placement supervisors are certified audiologists/speech therapists. A description of clinical placement specific to the particular year of studies is developed for each year of studies.

In the second year of studies, placement is implemented in the amount of 5 CP / 7.5 ECTS, it provides students with an opportunity to learn the specifics of the development of children of early, pre-school and primary school age and the disorders that are characteristic to this age.

In the third year of studies, placement in the amount of 11 CP / 16.5 ECTS provides an opportunity to acquire practical skills in work with children who have different aetiological functional disorders (hearing disorders, developmental disorders).

In the fourth year of studies, students acquire skills in working with adults in cases of different acquired speech, language, communication disorders (after stroke, as a result of dementia, after trauma, etc.). The amount of clinical placement in the fourth year of studies is 10 CP / 15 ECTS.

Clinical placement takes place in major clinics in Latvia. When choosing a placement site, the wishes of students regarding the placement site are taken into account as much as possible. As a certain amount of study time is devoted to placement, which mainly does not overlap with the duration of lectures and classes, students can implement clinical placement not only in the placement sites offered, but also in other regions and clinical institutions. When a student is interested in a specific place for clinical placement, the programme director, having listened to the student's wishes, takes the following actions:

- learns whether there is a certified audiologist/speech therapist at the existing, potential clinical placement site;
- learns whether the audiologist/speech therapist is interested in cooperating with RSU in the implementation of the placement;
- learns whether the potential institution has an interest in audiologist's/speech therapist's cooperation and provision of placement;
- the placement concludes a contract with the institution if there was no contract;
- the programme director initiates the involvement of a new placement supervisor in the Faculty of Rehabilitation and RSU.

Before each clinical placement, all the lecturers involved in the placement receive an invitation to participate in the meeting of placement supervisors, as well as receive documents on placement

organisation, requirements and assessment electronically. Newly involved placement supervisors are proposed individual talks with the programme director to discuss the organisation, requirements and assessment of placement.

During clinical placement, students cooperate with a clinical placement supervisor, who helps students to find their way in day-to-day work, plans their engagement in day-to-day work and provides feedback on each day's work and tasks. Clinical placement includes clinical case analysis sessions for students to develop analytical capabilities, set performance goals, and be able to plan the necessary therapies and implementation of therapy. Clinical case analysis involves clinical placement supervisors who prepare clinical cases and lead clinical case analysis for students.

The assessment of clinical placement is cumulative: a student receives 60% of the assessment for his or her activity at the clinical placement site (practical skills of the student, cooperation, student's attitude and scientific orientation in practical work are assessed), 20% come from the analysis and presentation of a clinical case which the student prepares during clinical placement, 20% is the assessment of the representation of own performance during clinical placement and preparation of the clinical placement logbook (portfolio).

Clinical placement ends with defending the placement by presenting a clinical case and providing answers about the clinical case. Clinical placement supervisors participate in clinical case defence facilitating the involvement of placement supervisor and provision of feedback. After clinical placement, clinical placement supervisors meet with the programme director, they share experiences regarding the course of placement, and recommendations of the placement supervisors are listened to for further improvement of the course of placement.

The objectivity of placement assessment has significantly improved over the last two years due to the development of assessment criteria for placement. Based on a talk with clinical placement supervisors, the development of clinical placement assessment criteria helps to assess students' performance more easily and objectively, and enables students to better understand the assessment and reasoning of their lecturers. Work on improving the assessment criteria should continue in the coming years to provide as objective assessment as possible of the student's work during placement (Annex 4.1, Paragraphs 4.1 and 4.3).

Clinical placement is mainly implemented in various medical treatment institutions of Latvia, including rehabilitation institutions. One of the most important cornerstones for achieving professional quality is the acquisition and strengthening of skills and the acquisition of clinical experience during clinical placement. Since the previous accreditation, particular attention has been paid to ensuring high-quality clinical placement.

The following actions were taken to improve the quality of clinical placement:

- in October 2020, the Quality Council of StP "Audiology and Speech Therapy" discussed issues related to the organisation of clinical placement, placement documentation and the development of criteria for the evaluation of clinical placement;
- a discussion was organised with clinical placement supervisors and students on the necessary improvements and improvements in the implementation of placement;
- on the basis of the results of the discussion, a common clinical placement assessment system was developed, the aims and objectives of placement were specified;
- meetings with clinical placement supervisors and students are organised before and after each clinical placement to discuss the progress and further improvement of clinical placement.

The ongoing work on improving clinical placement should continue in subsequent accreditation years (see Annexes 4.1, 4.2, 4.3).



Clinical placement requirements vary from year to year, but are always successive and complementary. Clinical placement in the 2<sup>nd</sup> year of studies is intended for students to become acquainted with the work of an audiologist/speech therapist in different institutions (in medical treatment, rehabilitation institutions, special and general educational institutions, social care institutions). During placement, students become acquainted with the strategy and tasks of operations of the specific institution, the principles of the multi-professional team of the medical treatment institution (physiotherapist, occupational therapist, nutritionist, physician, etc.) and the educational support team (audiologist/speech therapist, special educator, psychologist). They perform clinical placement tasks.

In the 3<sup>rd</sup> year of studies, clinical placement takes place in various medical treatment and rehabilitation institutions in Latvia. It is intended to gain practical skills in working with children with various developmental and functional disabilities that affect a child's ability to communicate (verbally, non-verbally). During placement, students led by the placement supervisor identify and treat speech, language, communication, voice, hearing impairment and other functional restrictions in children with various functional disorders.

In the 4<sup>th</sup> year of studies, clinical placement takes place in various medical treatment and rehabilitation institutions in Latvia. It is intended to provide practical skills in working with adults who have acquired communication (speech, language), voice, swallowing disorders of different aetiology. During placement, students learn to recognise speech, language, communication, swallowing disorders, and other language/speech disorders in adults. Clinical placement sites are: Riga East Clinical University Hospital (inpatient facility Gaīļezers, Bīķernieki, Latvian Oncology Centre), NRC Vaivari, etc.

### **3.2.5. Evaluation and description of the promotion opportunities and the promotion process provided to the students of the doctoral study programme (if applicable).**

### **3.2.6. Analysis and assessment of the topics of the final theses of the students, their relevance in the respective field, including the labour market, and the marks of the final theses.**

Thematic directions of final papers of students are defined in accordance with development trends and latest developments in the industry and labour market, interests and specialisation directions of students and Bachelor's thesis supervisors. Students choose topics independently or upon consulting with lecturers and formulate them together with Bachelor's thesis supervisors.

To successfully write a Bachelor's thesis, two meetings with students are organised in the study course "Development of Bachelor's Thesis and Defence": defence of the topic of a Bachelor's thesis and pre-defence of the Bachelor's thesis. Meetings are attended by the StP director, potential Bachelor's thesis supervisor, the course lecturer and students.

Defence of the Bachelor's thesis is one of final papers in StP "Audiology and Speech Therapy". Organisationally, defence of the Bachelor's thesis has been organised both face-to-face and remotely since 2017. Bachelor's theses have been successfully defended in both formats.

Table 3. Average assessment of Bachelor's theses in the last five years

Academic year	Average assessment, grade
2017/2018	8.2
2018/2019	7.3
2019/2020	8.1
2020/2021	8.2
2021/2022	8.2

The second final examination is the national degree examination.

Table 4. Average assessment of the national degree examination in the last five years

Academic year	Average assessment, grade
2017/2018	8
2018/2019	7.6
2019/2020	8.2
2020/2021	8.3
2021/2022	8.2

The topics selected for Bachelor's theses are important for the audiologist's/speech therapist's speciality. They are diverse, with a wide range of age groups ranging from infant age, such as "Testing reliability of the Latvian version of Ages & Stages Questionnaire – 48 Month Questionnaire" to topics related to adults in different age periods, such as "Prevalence of speech and voice disorders in Riga East Clinical University Hospital in patients with Parkinson's disease and their link to the stage of disease progression. A retrospective research". The currency of the topic is determined by both its topicality in the industry, such as the topic of mental health of children and adolescents addressed in the Bachelor's thesis "Quality of life for parents of children aged 3-18 years with an autism spectrum disorder" and the topicality in the world as a whole, such as in the context of the COVID-19 pandemic, the study "Telepractice services for speech-language therapy during the COVID-19 pandemic: parents' and students' Perceptions" and "The implementation of telepractice in Latvia during the Covid-19 pandemic: speech-language therapist survey". The topic of functional restrictions is topical for the industry and is reflected from the perspective of an audiologist/speech therapist in the paper "Functional disabilities from the perspective of a speech and language therapist for patients after the Covid-19 infection".

Many study courses in the study programme for an audiologist/speech therapist provide knowledge, practical skills and competence in work with children and adults with various hearing disorders. Every year, students carry out studies on hearing disorders when drafting a Bachelor's thesis. For example, "Testing reliability of the *PEACH* scale for children with grade V hearing impairment using

different assistive devices”, “Testing reliability of the Latvian version of the Scale of Auditory Behaviors (SAB)”, “Availability of induction loops for people with hearing aids”, etc. It should be noted that the instruments studied are used by audiologists/speech therapists in future professional activity.

Topics important to the field of audiology and speech therapy are raised both in course papers and in Bachelor’s theses on topics such as dyslexia (“Systematic review: Early diagnosis of dyslexia risks in infancy based on changes in brain structures and functions”), telemedicine (“Systematic review: The use of therapeutic robots in 4 - to 12-year-old children with autism spectrum disorder in promoting communication and social skills” and “Systematic review: Comparing the effectiveness of Telepractice and face-to-face treatment in stuttering therapy for pre-school children”).

Over the past decade, quality-of-life measurements have become clinically relevant health-related indicators that provide a comprehensive assessment of how the general health condition affects physical, social and emotional wellbeing, helps health professionals make decisions and plan individual treatment or rehabilitation measures, and assess the effectiveness of these measures.

Quality-of-life research is also one of the areas studied by students in their Bachelor’s theses, such as “Assessing the quality of life of 4-12 year old children with cerebral stroke: testing of the psychometric characteristics of the Latvian version of The CP QOL-Child Primary Caregiver (4-12yrs)”, “Testing of reliability of the Latvian version of the voice-related quality-of-life assessment instrument”. The diversity of specialties and directions of audiologists/speech therapists determine the diversity of topics selected by students. For example, there are studies on working with patients with congenital orofacial abnormalities – study “The correlation between hard cleft palate with soft cleft palate and speech disorders”, on aphasia “The prevalence of aphasia among patients with ischemic stroke at Riga’s Eastern Clinical University Hospital in 2020 and succession of rehabilitation services”, on swallowing disorders – “Adaptation of the *EAT-10 A* Swallowing Screening Tool into Latvian”. With the development of myofunctional therapy, a study called “Correlation of chewing function with tongue strength in children with adenoid hypertrophy” was performed.

When selecting topics, students perform studies which are topical for specialists working in a clinical environment, but other studies are also performed: on speech sound disorders, vocabulary research studies, the selection of the investigational sample of which is based on the population in the relevant age period in the educational environment.

### **3.3. Resources and Provision of the Study Programme**

**3.3.1. Assessment of the compliance of the resources and provision (study provision, scientific support (if applicable), informative provision (including libraries), material and technical provision, and financial provision) with the conditions for the implementation of the study programme and the learning outcomes to be achieved by providing the respective examples.**

Technical and methodological supplies of the study programme “Audiology and Speech Therapy” comply with aims and tasks of the study programme. To improve the quality of studies and ensure independent studies of students, lecturers are encouraged to actively participate in the preparation

of study materials in the *Moodle, Panopto* environment.

In academic years 2015/2016 and 2016/2017, the modernisation of StP “Audiology and Speech Therapy” started with the support of Boris and Inara Teterev scholarship. In the early stages, it included an innovative approach to ensuring and promoting the study process. The modernisation led to the creation of an audio and video card index to promote students’ self-directed learning process. As a result, several study courses were improved, and the improvement of the audio and video card index continues. Recordings collected in the audio and video card index are available in the implementation of several study courses, such as “Speech Sound Disorders of Different Origin”, “Language Disorders in Children”, etc. Thanks to the creation of the audio and video card index, the approach to the implementation of multiple study courses has changed significantly, fostering the in-depth learning process, fostering a technology-enriched study process, creating in students understanding of analysis, synthesis processes, feedback and the creation of practical experience and competence. For the provision of the study process several professional study courses use flipped learning as a study work organisation form, in which the independent work of the student prior to the class and the use of information technologies plays an important role (video materials, self-assessment tests, etc. are used), for example, in the course “Acquired Neurological Communication Disorders, Course Paper”, etc. Students also participate in supplementing the audio and video card index by creating video attachments for visual demonstration of different types of therapy, which are used in the study process. The improvement and modernisation of the study process continues every year. In academic year 2020/2021, the improvement of the study process in StP “Audiology and Speech Therapy” continued within the project “Improvement of the management process and study programme content modernisation at Rīga Stradiņš University” – creation of a repository of study materials – a methodological support tool for the implementation of interdisciplinarity and simulation principles based study process. Visual, audio and video materials created using the *H5* tool have been developed and included in the provision of study courses, preparation of a skills catalogue has started, creating skills descriptions in accordance with the guidelines for ensuring acquisition of skills. The modernisation, digitisation of the study programme and the introduction of a simulation-based teaching approach in the study process will continue in the following years (see Annex 4.1, Paragraphs 2.1, 2.2, 2.3).

For the provision of the study process to students and teachers, technical base for doing studies and research is supplemented in each year of studies. Different visual aids and material technical base are available, including models (ear, nasal cavity, mouth, etc.), posters (hearing parameters, brain structure, etc.), computer programs (*SnapeCoreFirst*, *SnapSceneLife*, etc.) used by students in the study course “Introduction to Alternative and Augmentative Communication”. Various test materials are also available, such as “Latvian Language Phoneme Testing Material”, “Boston Diagnostic Aphasia Examination”, etc. The material technical base includes different tools that Audiology and Speech Therapy students learn and are able to use in their professional activities and research, such as a lip strength meter, tongue strength meter, bite muscle strength meter (for example, a student used lip and strength measurement instruments to conduct a study called “Correlation of the chewing function with tongue strength in children with adenoid hypertrophy”), speech feedback tool, audiometer, tympanometer. Various aids are available to promote the development of lip, tongue strength and functions: chewy tubes, tongue function activation aids, etc. The study course “Medical Pedagogy: Montessori Method” uses various Montessori materials to create both language, hearing and general ideas.

### **3.3.2. Assessment of the study provision and scientific base support, including the resources provided within the framework of cooperation with other science institutes and**

**higher education institutions (applicable to doctoral study programmes) (if applicable).**

**3.3.3. Indicate data on the available funding for the corresponding study programme, its funding sources and their use for the development of the study programme. Provide information on the costs per one student within this study programme, indicating the items included in the cost calculation and the percentage distribution of funding between the specified items. The minimum number of students in the study programme in order to ensure the profitability of the study programme (indicating separately the information on each language, type and form of the study programme implementation).**

It is planned to finance the full-time study programme from the state budget and the funds of private and legal persons by setting the tuition fee in accordance with the state budget funding without social security in the amount of EUR 4890 of study year. Discounts on tuition fees are possible in accordance with internal regulatory documents. The number of students planned to reach in the four years of study of the full-time study programme is 94 students, with 33 students admitted in the first year of studies, and 11 student drop-outs predicted for the second year of studies, the number of students remaining unchanged in the third study year, and reaching 16 students in the fourth year of studies. After high inflation and rapid increase in energy prices, the result of the full-time study programme with such tuition fee per year is negative due to the lack of funding from the state budget in accordance with the Cabinet Regulations No. 994 – the basic costs of studies no longer cover infrastructure maintenance costs. Information on the additional funding allocated for the performance funding, approved in the budget of the Ministry of Education and Science, will be available on 2nd half of 2023.

The funding is used for staff remuneration, attraction of visiting lecturers, taxes, maintenance of IT infrastructure, purchase of equipment and facilities and expenditure on study visits. In addition to the direct costs of delivering lectures and conducting classes, the study programmes have to cover infrastructure maintenance costs (premises, IT solutions) and costs of other RSU common resources used in the study programmes (Student services, Library, organisation of the study process, grant to the Student Union and other support and administrative functions).

The study programme is implemented by the Department of Rehabilitation of the Faculty of Rehabilitation, Department of Welfare and Social Work, Department of Public Health and Epidemiology, Department of Sports and Nutrition, as well as Department of Health Psychology and Paedagogy of the Faculty of Public Health and Social Welfare, Department of Anaesthesiology and Intensive Care, Department of Occupational and Environmental Medicine, Department of Biology and Microbiology, Department of Human Physiology and Biochemistry, Department of Physics, Department of Internal Diseases, Department of Neurology and Neurosurgery, Department of Ophthalmology, Department of Otorhinolaryngology, Department of Paediatrics, Department of Psychiatry and Narcology, Department of Psychosomatic Medicine and Psychotherapy, Statistics Unit, Department of Clinical Skills and Medical Technology and Department of Morphology of the Faculty of Medicine, Department of Oral and Maxillofacial Surgery and Oral Medicine of the Faculty of Dentistry and the Language Centre. Remuneration of academic staff for the first year of the study programme is planned at approximately EUR 81 000.

*Table 5. Cost of the Study Programme*

<b>Title</b>	<b>Outcome with the existing tuition fee</b>	<b>Outcome with the expected tuition fee</b>
Average revenue per student, EUR	4 778	4 787
Average cost per student, EUR	5 267	5 271
Academic staff, %	47	47
Resources of departments, %	3	3
Other direct expenditure, %	2	2
Students' clinical training and placement costs, %	1	1
Scholarship costs, %	5	5
Average revenue per student, EUR	5	5
Average cost per student, EUR	37	37

### 3.4. Teaching Staff

**3.4.1. Assessment of the compliance of the qualification of the teaching staff members (academic staff members, visiting professors, visiting associate professors, visiting docents, visiting lecturers, and visiting assistants) involved in the implementation of the study programme with the conditions for the implementation of the study programme and the provisions set out in the respective regulatory enactments. Provide information on how the qualification of the teaching staff members contributes to the achievement of the learning outcomes.**

The implementation of the mandatory and restricted choice part of the professional Bachelor`s study programme "Audiology and Speech Therapy" is ensured by 78 teaching staff, 38 of whom have been elected to the academic positions of the RSU. Of the 38 elected representatives of academic staff, 3 are professors and 7 associate professors, 15 assistant professors, 8 lecturers and 5 assistants. Of the 38 elected academic staff, 25 hold a doctoral degree. Of the 78 teaching staff involved in the implementation of the StP, 61 are RSU employees (elected, acting or adjunct lecturer of the University) and 17 are invited lecturers.

The qualification of the academic staff involved in the implementation of the study programme is in conformity with the conditions for implementation of the study programme and the requirements of regulatory enactments and ensures achievement of the study programme, objectives of the relevant study courses and learning outcomes. Ilze Blumentale, director of the study programme, is

a certified speech therapist. The director of the study programme regularly engages in both educational and professional qualification improvement activities.

Qualified academic staff who implement study courses or themes of the relevant study course, the content and results of which are defined in the results to be achieved by study courses and programmes, is involved in the implementation of the study programme “Audiology and Speech Therapy”.

The implementation of the professional study courses of the StP “Audiology and Speech Therapy” is ensured by academic staff who are highly qualified professionals in their field, representing the leading state and local government funded healthcare institutions in Latvia (Psychiatry clinic of the Children's Clinical University hospital, the National Rehabilitation Centre (NRC) “Vaivari”, Riga East Clinical University Hospital RAKUS), the children's hearing Centre of Latvia (LBDzC)), as well as colleagues who successfully operate in the fields of social care and special education. The qualifications of academic staff are supplemented annually and are based on long-term professional experience. The academic staff involved in StP, who conduct professional study courses, perform both a professional activity and an academic activity, which enables students to provide knowledge by combining theoretical knowledge and practical experience. Academic staff of professional study courses have confirmed their qualification by obtaining an audiologist/speech therapist certificate of a medical practitioner (Certification of medical practitioners is performed by certification commissions of professional associations approved by the Union certification Board of Professional organisations of medical practitioners of Latvia). A certificate of a medical practitioner is granted after successful passing of a certification exam, evaluating and certifying theoretical knowledge and practical skills of a medical practitioner in the principal specialty, sub-specialty, additional specialty or use of a medical or diagnostic method). Every five years, specialists carry out recertification (150 continuing education points (CEP) must have been acquired for recertification, confirming the specialist's knowledge, skills and competence in professional activities.

Several lecturers, who are specialists in their field, who graduated from the StP “Audiology and Speech Therapy” and obtained a Bachelor’s degree or Master’s degree, have been involved in the implementation of study courses over the last five years. One lecturer continues doctoral studies (Līga Savicka, study course “Acquired Neurological Communication Disorders, Course Paper”). Young lecturers also get involved in ensuring clinical placement. It should be noted that lecturers from different Latvian regions, for example, Liepāja, Valmiera, Saldus and Rēzekne (Daina Ābele, Gita Glezere and other) are involved increasingly more often in the implementation of clinical placement.

Visiting lecturers are also involved in the implementation of StP with the *Erasmus+* mobility programme. In academic year 2019/2020, visiting lecturers from the Polytechnic Institute of Leiria, Portugal, read lectures and led practical classes for students of StP “Audiology and Speech Therapy” and “Occupational Therapy”, as well as members of the Latvian Association of Audiologists and Speech Therapists. The specialists representing specific areas were involved in the provision of study courses. They provided knowledge and practical skills in the areas they represented, such as a representative of *Tobii Dynavox*, who has 30 years of experience as a speech and language specialist, engaged in the implementation of the study course “Introduction to Alternative and Augmentative Communication” for several years, introducing students to new technologies and software used to ensure the communication process. During studies, as a result of cooperation between RSU and the Latvian Association of Audiologists and Speech Therapists students could participate in the conferences organised by the Latvian Association of Audiologists and Speech Therapists and listen to lectures of foreign lecturers (from Belgium, United States. Etc.) on different topic that are important for an audiologist/speech therapist (students participate in conferences free of charge).

11 of the academic staff, or ~ 29% of all elected academic staff involved in the implementation of the StP have been employed at least once in RSU scientific projects since 2017, 37% of the elected staff involved in the implementation of StP have an Latvian Council of Science (LZP) expert status (Annex 24.7).

From 1 January 2017 to 1 October 2022, 57 lecturers of the study programme “Audiology and Speech Therapy” participated in continuing education activities of the RSU Centre for Educational Growth attending more than 170 training activities of different content. The lecturers of the study programme “Audiology and Speech Therapy” spent 6668 academic hours on mastering continuing education activities. The lecturers participated in the following activities:

- Creation of animated visual studio materials;
- Reference management tool *EndNote*;
- Remote work of student groups with the *Miro* tool;
- Open access to scientific information;
- *Collaboration and Partnership Towards Professional and Sectoral Development: Local, National, Transnational*;
- *Contextualizing the use of Webinar in Higher Education*;
- *Creating Engaging and Interactive Classrooms through Active Learning Techniques*;
- The *PubMed* database and its tools for searching for scientific publications;
- Digital nuisances – changes and innovations encouraging organisations to change;
- Teaching in intercultural environments;
- Think tank: How to assess to learn?;
- Creation of electronic tests;
- Drafting of interactive study materials (*H5P*);
- Interactive presentations and real-time feedback in the *Mentimeter* tool;
- Improvisation in pedagogical activities;
- How games activate teaching and learning;
- How to promote the acquisition of transversal skills relevant to the working environment in the study process;
- How to create effective image and text compositions in teaching materials;
- Potential of conflict for building cooperation;
- Research methodology and statistical processing of data;
- Mediation – wilful and responsible conflict resolution culture at a university;
- Visualization of content in presentations;
- Development of a study course. Formulation and evaluation of learning outcomes;
- *Turnitin*: How to assess students’ papers more qualitatively and effectively?;
- Creating videos: complex in a simple and short way.

When summarising information on the lecturers, who are RSU graduates, it has been concluded that 35 lecturers graduated from an RSU study programme (from one up to three), but eight lecturers study in one of the programmes right now (in academic year 2021/2022).

### **3.4.2. Analysis and assessment of the changes to the composition of the teaching staff over the reporting period and their impact on the study quality.**

When thinking about the provision of the study programme and succession of its teaching staff in the future, new lecturers are involved in the implementation of StP “Audiology and Speech



Therapy”, who demonstrate both academic and scientific research interest. Several lecturers graduated from the Bachelor’s StP “Audiology and Speech Therapy” (for example, A. Čistjakova, Signe Brusbārde and other), then continued studies and graduated from the Master’s study programme “Rehabilitation” (Anita Kursiša, Santa Salaka and other), some continue with doctoral studies (Līga Savicka).

Since 2021, lecturer Līga Savicka has been performing assistant’s duties at the Faculty of Rehabilitation (earlier the lecturer was an invited teacher, then acting assistant at the Rehabilitation Research Laboratory), in parallel the lecturer improves her research skills in the RSU doctoral study programme “Medicine” writing her doctoral thesis on the topic “Assessment, risk factors of and characterisation of care organisation for oropharyngeal dysphagia and malnutrition in neurological patients in treatment and rehabilitation facilities”. The lecturer is also involved in the implementation of international research within *Erasmus+* graduate mobility, cooperate with colleagues from the University of Gothenburg. The lecturer realises her knowledge and experience by getting involved in the implementation of several study courses, for example, “Acquired Neurological Communication Disorders, Course Paper”, “Evaluation and Classification of Restrictions of Functional Capabilities”, etc.

During the reporting period, new lecturer Santa Salaka performed duties of acting assistant at the Rehabilitation Research Laboratory, in parallel getting involved in research work in the professional organisation of audiologists/speech therapists Latvian Association of Audiologists and Speech Therapists and in academic work – in the implementation of the study “Dysphagia in Adults and Children”. The lecturer is a co-author of several scientific publications, for example, “Rare Clinical Case – Actinomycosis of Pharyngeal Part”,<sup>[1]</sup> *Comparison of Content and Psychometric Properties of Malnutrition Outcome Measures: A Systematic Review*.<sup>[2]</sup>

Several lecturers joined StP “Audiology and Speech Therapy” as invited lecturers. They provide students with clinical placement in different medical and education institutions in Latvia. Invited lecturers complement their professional knowledge, practical skills and competence at different seminars and conferences. They are certified specialists, who participate in different projects (for example, Anita Kursiša, Jeļena Kondratjeva).

Lecturer Kristīne Riemere joined academic staff and implements several professional study courses, for example, “Didactics. Medical Pedagogy: Montessori Method”. The lecturer wrote her Master’s thesis on the topic “Adaptation of the Automatized Naming Stimulus Test in Latvian population of 5-year-old children”, the lecturer continues her scientific research work as confirmed by her participation in a conference with the work *Standardization of RAN-RAS Test in Latvian Population of 5-18-Year-Old School Students*.<sup>[3]</sup>

The rotation of academic staff mainly takes place by adding lecturers. Individual StP lecturers changed their status from RSU as their additional workplace to the main workplace (for example, Ilze Blūmentāle). Unfortunately, the programme has lost its long-term lecturer, professional in her field Ināra Kalēja, who died.

Academic staff participates in different international conferences and seminars, complementing their theoretical knowledge and practical skills, which they use to improve the study process. For example, in October 2021, Ilze Klatenberga and Ilze Blūmentāle participated in *COST Action CA 16234 Training School* improving interdisciplinary cooperation. Lecturer Andra Vabale was involved in the development of several projects, for example, “Feasibility study for the development of a single set of methodological instruments for the assessment of children’s early development needs” (the project was implemented on the basis of a contract between the Cross-Sectoral Coordination Centre and the University of Latvia) and “Situation study regarding the functional assessment systems available in Latvia and abroad, development of a description of the functioning assessment

system and educational measures for specialists of participating interest-related groups". Santa Salaka participated with an oral report "Dysphagia identification and management algorithms".

Several lecturers participated in the projects supported by the Boris and Inara Teterev Foundation (BITF) to improve the quality of studies (for example, Ilze Blūmentāle, Līga Savicka).

[1] A description of the publication is available on the RSU Research Portal (information is available only in [English](#)).

[2] Information on the publication is available on the RSU Research Portal (information is available only in [English](#)).

[3] The abstract is available on the RSU Research Portal (information is available only in [English](#)).

**3.4.3. Information on the number of the scientific publications of the academic staff members, involved in the implementation of doctoral study programme, as published during the reporting period by listing the most significant publications published in Scopus or WoS CC indexed journals. As for the social sciences, humanitarian sciences, and the science of art, the scientific publications published in ERIH+ indexed journals or peer-reviewed monographs may be additionally specified. Information on the teaching staff included in the database of experts of the Latvian Council of Science in the relevant field of science (total number, name of the lecturer, field of science in which the teaching staff has the status of an expert and expiration date of the Latvian Council of Science expert) (if applicable).**

**3.4.4. Information on the participation of the academic staff, involved in the implementation of the doctoral study programme, in scientific projects as project managers or prime contractors/ subproject managers/ leading researchers by specifying the name of the relevant project, as well as the source and the amount of the funding. Provide information on the reporting period (if applicable).**

**3.4.5. Assessment of the cooperation between the teaching staff members by specifying the mechanisms used to promote the cooperation and ensure the interrelation between the study programme and study courses/ modules. Specify also the proportion of the number of the students and the teaching staff within the study programme (at the moment of the submission of the Self-Assessment Report).**

Continuous cooperation with lecturers, students, graduates, employers, the Council of the Faculty of Rehabilitation, department, etc. is promoted and implemented for successful activity and the achievement of aims, tasks and learning outcomes of StP "Audiology and Speech Therapy".

Twice a year, the director of the study programme analyses the results of the study course

assessment questionnaires, recommendations and comments of students. To improve the study programme, the results of the survey are discussed with the heads of study courses and the lecturers involved. Changes are made to improve the study process if necessary.

Communication with heads of the study courses is maintained when planning and implementing annual planning. Each year, when planning the next academic year, the implemented study courses are reviewed and the necessary changes are introduced (outcomes of the study course, the planning of lectures and classes are updated, the types of examinations are clarified, etc.). Those heads of study courses whose study courses require improvement are contacted electronically or by phone (for example, about 20 e-mails were sent and many calls were made while planning academic year 2022/2023, talking to heads of study courses and discussing necessary changes).

Before each semester, the content, outcomes and interconnection of the study course with other study courses is discussed. Discussions with lecturers promote improvement, continuity and non-overlapping of study content. For example, the study course “Latvian Language Phonetics and Phonology” is implemented in the first year of studies. The content of studies has been repeatedly discussed with the head of the study course, and the study course provides basic knowledge of normal sound pronunciation and phonological processes. In the second year of studies, on the basis of the theoretical and practical basis previously acquired, students learn types of sound pronunciation disorders, interference analysis and therapy in the study course “Speech Sound Disorders of Different Origins”. Review of the content of study courses, clarification of aims, tasks and outcomes promote succession in the acquisition of knowledge and practical skills and the total learning outcome (see Annex 4.1, Paragraph 8.1).

Changes necessary for ensuring the study process are discussed in the StP Quality Board and Council meetings of the Faculty of Rehabilitation, the experience of other programme directors, the opinion of the members of the Quality Board and recommendations for improvement of the study process are heard (for example, on 9 October 2020, the Quality Board analysed the results of the survey of academic year 2018/2019, graduates suggested that simulations should be used more to improve the quality of the study process, improve the planning of lectures and classes, etc.). On the basis of the results of the discussion, StP was improved both by engaging in projects relating to the use of simulations and by discussing the planning of the study process with representatives of the Study Department.

If a new lecturer is involved in the implementation of the study content, the course of the study process is always discussed with the invited lecturer in person or remote meetings are organised on the *Zoom* platform.

Mutual cooperation between lecturers is encouraged by organising face-to-face and remote meetings for lecturers of different study courses involved in StP, as well as meetings within the framework of the study programme. For example, there are regular meetings with the lecturers involved in clinical placement before and after the study course “Clinical Placement” Communication and Language / Speech Disorders in Children” to discuss placement details, placement tasks and assessment, as well individual provision of feedback is organised after placement. Around 10 lecturers are involved in the provision of the clinical placement intended for communication, speech and language disorders of children. All lecturers were invited to a meeting on placement on the *Zoom* platform. At the meeting, lecturers shared their experience in the work with students, and new invited lectures could ask experienced colleagues questions and get answers to any questions of interest.

The director of the programme gets involved in the observation of teaching in the study process to get an insight on the study process or draw experience from colleagues. Observation of teaching is one of the methods that provide insight into the study process, mutual cooperation between the

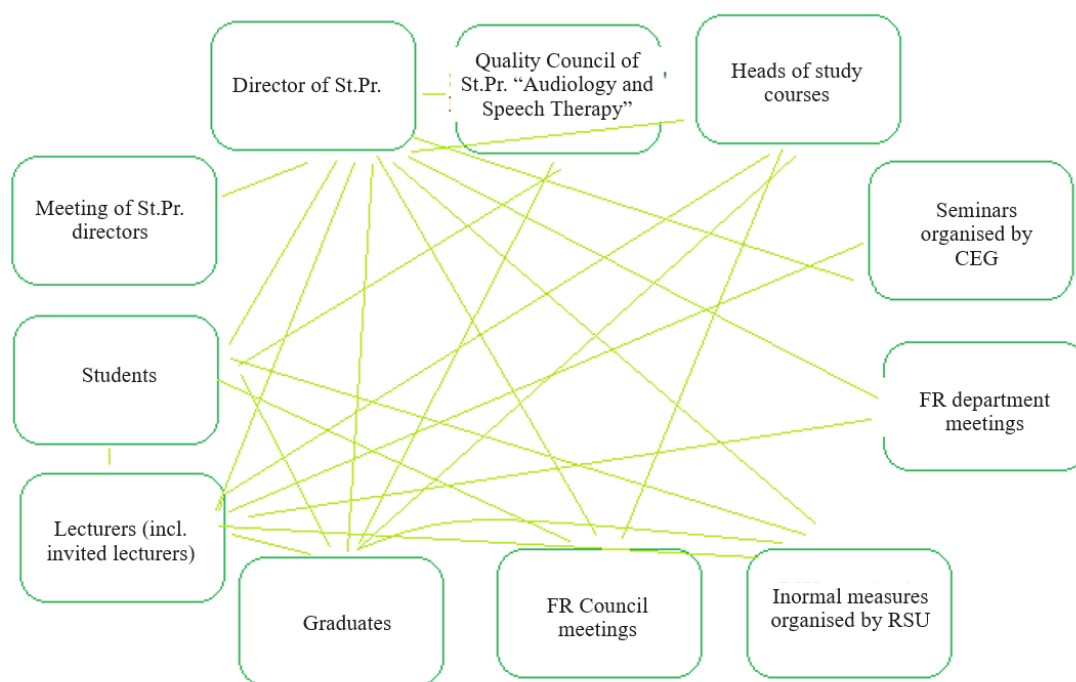
lecturer and the student and provides new ideas for the organisation of study work. For example, this year the StP director participated in the class led by a new lecturer Jelena Kondratjeva in study course "Introduction to Alternative and Augmentative Communication". During the class, students learned a freely available programme for evaluating and forecasting communication in English. In a talk between the lecturer and students, an idea emerged to translated the communication assessment protocol and guidelines into Latvian, and one of the students expressed her wish to do this as part of her Bachelor's thesis.

Department meetings of the Faculty of Rehabilitation with participation of lecturers involved in the Department of Rehabilitation are organised several times per semester. This is a perfect opportunity not only to obtain information on the latest news, related to the work of RSU and the Department of Rehabilitation, but also to meet colleagues involved not only in the implementation of StP "Audiology and Speech Therapy", but implementing other StP study courses. This is a perfect opportunity to promote interdisciplinarity and the achievement of common goals.

A meeting of directors of the study programme is organised once a semester, which is attended by director of all the study programmes implemented by RSU and current matters related to the work of the study programme are discussed.

In summer, the director of the study programme organises an informal meeting with the lecturers involved in the study programme. The informal environment is good for team-building, promotes creative ideas and is a good place to discuss matters from different points of view.

Figure 3. Teaching staff cooperation diagram



The ratio of the number of students and teaching staff in the study programme is: 100 students and 78 lecturers. The ratio of students to teaching staff is 1.3.

# Annexes

III - Description of the Study Programme - 3.1. Indicators Describing the Study Programme		
Sample of the diploma and its supplement to be issued for completing the study programme	24.1_Anx_Sample_Diploma_and_Supplement_PBSP_Audiology_and_Speech_Therapy.pdf	24.1_Diploms_un_pielikums_PBSP_Audiologopedija.pdf
For academic study programmes - Opinion of the Council of Higher Education in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions (if applicable)		
Compliance of the joint study programme with the provisions of the Law on Higher Education Institutions (table) (if applicable)		
Statistics on the students in the reporting period	16_Anx_Statistics_Audiology_and_Speech_Therapy.pdf	16_pielik_Audiologopedija_statistika_lv.pdf
III - Description of the Study Programme - 3.2. The Content of Studies and Implementation Thereof		
Compliance with the study programme with the State Education Standard	17.1_Anx_Compl_with_Nat_Ed_Stand_Audiol_and_Speech_Ther.pdf	17.1_pielik_Atbalst_valsts_izgl_standartam_Audiologopedija.pdf
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard or the requirements for professional qualification (if applicable)	18.2_Anx_Mapping_StP_to_Profession_Standard_Audiology_and_Speech_Therapy.pdf	18.2_profesijas_standarta_kartejums_Audiologopedija.pdf
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)	17.2_Anx_Compliance_with_Field-Specific_Regulations_Audiology_and_Speech_Therapy.pdf	17.2_pielik_Atbalstiba_nozares_specifiskajam_regulejumam_Audiologopedija.pdf
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	18.1_Anx_Study_Course_Mapping_Audiology_and_Speech_Therapy.pdf	18.1_pielik_Studiju_kursu_kartejums_StP_rezultatu_sasniegshanai_PBSP_Audiologopedija.pdf
The curriculum of the study programme (for each type and form of the implementation of the study programme)	19_Anx_Study_Plan_Audio_and_Speech_Ther.pdf	19_pielik_StP_planojums_Audiologopedija.pdf
Descriptions of the study courses/ modules	20_Anx_Study_course_description_Audiology_Speech_therapy.pdf	20_pielik_Kursu_apr_Audiologopedija.pdf
Description of the organisation of the internship of the students (if applicable)	9_Anx_Organisation_of_student_placement_Audiology_and_Speech_Therapy.pdf	9_pielikums_Studejoso_prakses_organizacijas_apraksts_Audiologopedija.pdf
III - Description of the Study Programme - 3.4. Teaching Staff		
Confirmation that the academic staff of the doctoral study programme includes not less than five doctors, of which at least three are experts approved by the Latvian Council of Science in the branch or sub-branch of science in which the study programme intends to award a scientific degree (if applicable)		
Confirmation that the academic staff of the academic study programme complies with the requirements specified in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions (if applicable)		

# Health Management (45345)

Study field	<i>Health Care</i>
ProcedureStudyProgram.Name	<i>Health Management</i>
Education classification code	<i>45345</i>
Type of the study programme	<i>Academic master study programme</i>
Name of the study programme director	<i>Daiga</i>
Surname of the study programme director	<i>Behmane</i>
E-mail of the study programme director	<i>daiga.behmane@rsu.lv</i>
Title of the study programme director	<i>Docente, Ph.D.</i>
Phone of the study programme director	
Goal of the study programme	<i>To prepare highly qualified specialists for professional management work and research in health sector possessing the fundamental theoretical and practical knowledge and abilities in health management and health economics, strategic management of human resources and ensuring a sustainable development of organisation, as well as theoretical knowledge and practical skills in the area of health management scientific research.</i>
Tasks of the study programme	<i>1. To educate students, ensuring the attainment of the Level 5 professional qualification Company and Institution CEO in the Field of Health Care, as well as bolstering their competitiveness in changing socioeconomic conditions and in the international job market;</i> <i>2. To ensure the attainment of study results (knowledge, skills and competence) in conformity with the knowledge, skills and competence of Level 7 of the European Qualifications Framework as stipulated in the Latvian educational classification.</i>

Results of the study programme	<p>1. Has learned theories used in health management and the industry's latest discoveries and understands their application in research and in practice in health care sector and institution management.</p> <p>2. Able to independently choose the most appropriate methodology and set of types of solutions and use them in practice to rectify health management problems; and able to use currently relevant leadership and change management skills in practice.</p> <p>3. Able to justify, argue and defend his opinion, engage in debates, as well as being able to work in domestic and international scientific projects in health management; if necessary, forming collaborations with professionals in other sectors and integrating knowledge from various fields in solving problems.</p> <p>4. Able to acquire new knowledge as well as keep track of the development of health management after the completion of their studies and use this creatively in research and practice, facilitating the development of the sector; as well as to work towards the development of a collective solution in a group.</p> <p>5. Able to make evidence-based decisions in health management science and practice, as well as to understand their necessity, assessing the prospective impact on the field of health management, setting goals for further action, justifying the formulation of proposals for legislation and changes of a structural and organisational nature.</p> <p>6. Able to identify and justify aspects of health management required for research, choose appropriate research approaches, and obtain and analyse data. Able to conduct independent research activity, completing all stages of a study, observing the ethical aspects of professional activity.</p>
Final examination upon the completion of the study programme	Master's Thesis

## Study programme forms

### Full time studies - 2 years - latvian

Study type and form	Full time studies
Duration in full years	2
Duration in month	0
Language	latvian
Amount (CP)	80
Admission requirements (in English)	Bachelor's degree or second level professional higher education in social sciences, medical engineering or health care with the right to continue studies in a master's degree programme. For studies in English, a minimum level of B2 English. Entrance examination.
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	Master of Social Sciences in Management and Administration
Qualification to be obtained (in english)	-

### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

### Full time studies - 2 years - english

Study type and form	<i>Full time studies</i>
Duration in full years	2
Duration in month	0
Language	<i>english</i>
Amount (CP)	80
Admission requirements (in English)	<i>Bachelor's degree or second level professional higher education in social sciences, medical engineering or health care with the right to continue studies in a master's degree programme. For studies in English, a minimum level of B2 English. Entrance examination.</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	<i>Master of Social Sciences in Management and Administration</i>
Qualification to be obtained (in english)	-

### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007



## 3.1. Indicators Describing the Study Programme

**3.1.1. Description and analysis of changes in the parameters of the study programme made since the issuance of the previous accreditation form of the study field or issuance of the study programme license, if the study programme is not included on the accreditation form of the study field, including changes planned within the evaluation procedure of the study field evaluation procedure.**

*Table 1. Changes in StP parameters*

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period	Planned changes within the assessment procedure
1.	Study direction	—	—
2.	Title of StP	—	—
3.	Code according to the Latvian Education Classification	45 345	—
4.	Head of StP	—	—
5.	Scientific degree of the Head of StP	Doctor of Science ( <i>Ph. D.</i> ) in economics and business	—
6.	Aim of StP	To prepare highly qualified specialists for management work in health sector possessing the fundamental theoretical and practical knowledge and abilities in health management and health economics, strategic management of human resources and ensuring a sustainable development of organisation, as well as theoretical knowledge and practical skills in the area of health management scientific research.	—
7.	Tasks of StP	—	Tasks of the StP have been amended to match those of the partnering university.

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period	Planned changes within the assessment procedure
8.	Learning outcomes to be achieved	<p>MVV-Z1: Learned the theories and latest industry discoveries used in health management and understands their application in both research and practice of health care sector and institution management.</p> <p>MVV-P2: Ability to select independently and apply practically the most suitable method and solution to prevention of a complex health management issue and ability to apply up-to-date leadership and transformation management skills.</p> <p>MVV-P3: Ability to justify, substantiate and defend his/her opinion, participate in a debate, ability to work in both local and international scientific health management projects and develop cooperation with professionals of other areas, when necessary, and integrate knowledge of multiple areas in solving a problem.</p> <p>MVV-P4: Ability to gain new knowledge and follow the development of health management also after completed studies, ability to apply them creatively in research and practice, this contributing to development of this sector, as well as work in group for development of a collective solution.</p> <p>MVV-K5: Ability to make evidence-based decisions in health management science and practice, understanding the necessity of these decisions, assessment of the prospective impact on health management area, ability to set the future action objectives, justifying the proposals for amendments of legislative, structural and organisational nature</p> <p>MVV-K6: Ability to identify and justify the health management aspects required in research, to select the appropriate scientific approach, to gather and analyse data. Ability to carry out research activity by completing all the research stages in compliance with the ethical aspects of professional activity</p>	—
9.	Final examination upon the completion of StP	Master's Thesis	—
10.	Type and form of studies	—	—

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period	Planned changes within the assessment procedure
11.	Duration of implementation	2 years	—
12.	Language of implementation	—	—
13.	Volume of StP (CP)	80 CP / 120 ECTS	In accordance with amendments to Section 1(8) of the Law on Higher Education Institutions, which entered into force on 11 October 2022, the transition to the European Credit Transfer and Accumulation System will be implemented until 31 December 2024.
14.	Admission requirements	—	Admission requirements specified to comply with the admission requirements of the partnering university.
15.	Degree to be awarded	Degree of the Master of Social Sciences in Management and Administration.	
16.	Qualification to be awarded	No qualification is awarded.	—
17.	Place of implementation	—	

During the accreditation period, the Master's study programme jointly implemented by Rīga Stradiņš University (RSU) and the RISEBA University of Business, Arts and Technology was changed from a professional study programme to an academic study programme, respective changes were made to the accreditation sheet of RSU study direction "Health Care" (Decision No. 2021/10-I of the AIC Study Quality Commission of 8 September 2021).

As a result of these changes, the code of the study programme changed from 47 726 to 45 345, the volume of the study programme changed from 60 to 80 CP, as well as the duration of studies changed from one year and six months / two years to two years, the degree and qualification awarded as a result of mastering the study programme changed from "professional Master's degree in Health Management and qualification of the head of a company and institution" to the "degree of the Master of Social Sciences in Management and Administration".

The implementation of changes to the study programme started with admission for academic year 2022/2023, with a transition period until May 2023, until which the professional Master's degree and the respective qualification should be awarded.

Within the assessment procedure, the admission requirements and objectives of the study programme have been amended to match those of the partnering university.

### **3.1.2. Analysis and assessment of the study programme compliance with the study field. Analysis of the interrelation between the code of the study programme, the degree,**

**professional qualification/professional qualification requirements or the degree and professional qualification to be acquired, the aims, objectives, learning outcomes, and the admission requirements. Description of the duration and scope of the implementation of the study programme (including different options of the study programme implementation) and evaluation of its usefulness.**

The content of the study programme focuses on mastering competences, knowledge and skills of an interdisciplinary management in the field of health care. The title of the study programme "Health Management" and the degree to be awarded "Degree of the Master of Social Sciences in Management and Administration" are an evidence of that. The code of the study programme is 45 345, which correlates with the content of this study programme, the degree to be awarded and the title – in the classification of education, the starting part of the code (45) is used for an academic Master's study programme, while the part of the code (345) in the classification of education corresponds to the group of education programmes "Management and Administration" and the content and focus of AMSP, which covers management and administration matters and are related to the health system.

The learning outcomes of the study programme "Health Management" are formulated as knowledge, skills and competences and meet the requirements of the organisation manager's standard and the seventh level of the Latvian Qualifications Framework (LQF 7), which is defined in the organisation manager's standard, although StP is an academic study programme, like the health sector, it is interdisciplinary, and its aims are related to the learning of theory of the health management field of science and its practical use in the management of the health care system and companies. RSU study courses mostly focus on learning knowledge at the level of health system management and administration, such as the course "Health System Design", "Public Health and Epidemiology", "Legal Aspects of Health Management" and other study courses, which can be and are implemented also in other programmes of the Faculty of Public Health and Social Welfare and which are related to the study direction "Health Care". Consequently, it is justified to continue implementing the programme in the RSU study direction "Health Care".

The content of the study programme is regularly updated with the aim of promoting the topicality and improvement of quality of the programme in accordance with the global development trends and challenges of the health sector to ensure the possibility to provide students with extensive and in-depth theoretical knowledge in health management, to increase students' skills and competences in the use of modern health management instruments, linking theoretical knowledge with understanding of its use.

Three new elective study modules, each in the amount of 20 CP/30 ECTS, are offered to students instead of the 3<sup>rd</sup> semester placement implemented in the amount of 20 CP/30 ECTS for the implementation of the transition from a professional to an academic programme:

- "Economic Modelling in Health Care";
- "Digital Health";
- "Entrepreneurship, Health Care Organisation Management and Administration".

The new study modules enable students to learn better about current developments in the health sector, the change management approach and prepare for the Master's thesis. Students retain the possibility to learn practical skills in depth in the amount of 4 CP/6 ECTS at the end of semester 2, implementing it either in practice in a company or participating in the international summer school on health management implemented in the programme.

The admission requirements of the study programme “Health Management” are: Bachelor’s degree or level 2 professional higher education in social sciences, medical engineering or health care with the right to continue with Master studies. Admission also takes into account the professional experience of the candidate in the management of health care organisations. Candidates with a previously obtained Bachelor’s degree in another field of science or previously obtained education in medicine are offered the opportunity to acquire the missing basic knowledge in economics by taking an additional study course “Basics of Economics” in the form of distance learning at RISEBA.

The duration of the study programme is two years (four semesters). It is implemented in the amount of 80 CP/120 ECTS regardless of the previous education or professional qualification of the student. The study programme is mastered in the form of interrelated and successive modules, which form the multidisciplinary content of the programme in accordance with the competence of each institution of higher education and effectively ensure the achievement of learning outcomes.

The study programme is implemented in Latvian and English. Both versions of the programme have the same requirements and both versions of the StP meet the requirements of the normative acts of the Republic of Latvia (Cabinet of Ministers No. 240) for this type of education. The implementation of the programme in Latvian and English provides students with the opportunity to study in an international environment, thus promoting the development of intercultural skills and knowledge exchange.

Thus, the degree to be obtained in the study programme “Health Management”, the aims, tasks and expected results of the programme, as well as the admission conditions and versions of the programme, are interlinked and oriented towards achieving effective learning outcomes.

Enclosed:

Annex 24.1. Model diploma and supplement thereto.

Annex 24.8. Study contract sample.

### **3.1.3. Economic and/ or social substantiation of the study programme, analysis of graduates' employment.**

Health management as science is rapidly evolving in the context of both its theoretical concepts and digitalization and change management. The main global challenges of health sector management relate to the constantly growing needs of the population, both due to population ageing and the potential of new medical technologies in the context of limited resources. Latvia’s health care system lags behind that of other European Union countries in many indicators if compared internationally: Latvia has highly preventable mortality rates, an integrated approach to health care is still not fully developed, involvement of patients in decision-making regarding their health is weak, as well as quality needs to be improved and there are other shortcomings that require academic knowledge and skills and competences to be used in progression of systemic issues.

Demand for new health services increases year on year. This is due to significantly growing costs. Decision makers and managers in the health sector therefore need tools and technological solutions to assess the return on investment and the cost-effectiveness of new medical technologies.

Taking into account the trends and challenges of the sector, the study programme has been supplemented with study content in the fields of economic modelling and digital health. The

modelling approach makes it possible to assess the efficiency of investment in resources and processes, decide on the use of the most efficient methods and optimisation of processes. Both the manager of the company and the sector require knowledge that enables them to be familiar with the relevant health economy instruments, as well as need skills in choosing specific modelling approaches to address certain challenges. Basic knowledge on economic modelling enables a manager to build a systemic approach to evidence-based and economic reasons-based decision-making.

Digitalisation opportunities have created a new health sector ecosystem in which data use and analytics play a key role in sound decision-making. Modern health care relies on analysis of both population and individual data. Digital health includes both digital data storage and analysis methods and e-health technological solutions that are used to support the treatment process, implement telemedicine and ensure a result-based treatment approach. A health sector manager needs to know and find one's way in the digital solutions to be used for the input, storage and use of electronic data of the company and the sector. Theoretical knowledge provides the manager with the skills to choose specific digital solutions, understand the operational principles of new medical digital technologies, and build an effective in-house digital strategy, a team of digital medical professionals, databases, and choose the right digital analytics tools for effective decision-making.

With the continuing challenges facing the health sector relating to globalisation of the health care services market, increasing competition and demand for a patient-centred approach, the involvement of patients in the treatment process, the increase in their experience and knowledge, new channels of information, digitisation and other development trends, the environment and processes for the provision of health services are also changing. A health sector manager requires knowledge of the strategic management of the company, the creation of appropriate processes and the provision of resources. This requires new knowledge of innovation, business management, business competitiveness in the context of the new challenges.

The results of surveys of students, employers and graduates are used for improvement of the quality of studies. For example, changes in the study programme and changes from professional to academic were encouraged by the graduates of the programme, the Study Quality Council, as well as representatives of employers. Students encouraged the development of cooperation with students of other institutions of higher education abroad, as a result of which an international summer school with participation of foreign lecturers and students is organised annually in the programme. The changes made to the study programme both increase the attractiveness of the programme from the point of view of potential students and increase its competitiveness, as well as contribute to the prospects of graduates in the labour market.

From 2022, once a year the programme organises a presentation of Master's theses of students of the programme to a wider range of industry professionals, including representatives of medical treatment institutions, and the Ministry of Health and its institutions. During the event, students demonstrate the knowledge acquired by analysing and providing solutions to the industry's challenges and gaining valuable feedback. The event is designed as a demonstration of the programme's performance and a discussion platform in which industry professionals make valuable recommendations for future research areas for student research.

The importance of the programme is also evidenced by the increasing demand of the Ministry of Health and its institutions for trainees. Good cooperation has developed with the National Health Service, which annually coordinates the topics of student placement, which are mainly related to the use of health economics instruments, financial and human resources analysis, the introduction of new innovative health services and approaches.

As the need for qualified medical personnel is consistently high both in Latvia and abroad, StP

graduates have ample opportunities to apply the knowledge and skills acquired in the study programme in the field of health management. Graduates of the programme work in health care institutions in Latvia and abroad, as well as in health care administration, health insurance institutions and municipalities.

**3.1.4. Statistical data on the students of the respective study programme, the dynamics of the number of the students, and the factors affecting the changes to the number of the students. The analysis shall be broken down into different study forms, types, and languages.**

The study programme is in demand. An increase in the number of students is observed every year. The total number of students starting studies increased by 76%, comparing academic year 2016 to academic year 2021, and 58 students were admitted to the programme in academic year 2021/2022. A small drop in the number of applicants was observed in academic year 2022/2023 based on Covid-19 conditions. Overall, the study programme also ensure a positive dynamics of graduates.

Student drop-outs are mainly related to their personal reasons: inability to combine studies with employment, lack of time and inability to combine studies with family needs. The number of expelled students is small (5-6%), part of students use academic leave opportunities. The largest drop-outs of students in the reporting period, especially in the 1st year of studies (16 students) was observed in academic year 2021/2022, was related to the Covid-19 situation.

The student count in the programme in Latvian shows a positive increase, but in the programme in English there has been a drop in applicants in the last years with the restrictions imposed during the Covid-19 pandemic being the main reason. International students represent different countries, there are more of students from India and Belarus.

Eight state budget funded study places are granted to the study programme in Latvian every year. Thus, most of students study for their private funds – 76% in academic year 2021/2022 and 73% of all students in academic year 2022/2023 (see Annex 16).

Covid-19 conditions showed that more attention needs to be paid to remote studies, so the programme's priority is diversifying study types and developing study materials accordingly. A combined study approach has been created in the programme – some of the study content is implemented face-to-face, but some – remotely. A great deal of attention is paid to students' ability to learn study material by structuring it more effectively and focusing it on learning flexibility. New forms of study are introduced – active learning and active listening, discussions, work in groups and using innovative technologies. Mastering of the programme focuses on both acquiring theoretical knowledge and analysing cases and problems, encouraging students to understand the practical application of theoretical knowledge learned.

Students can use inbound and outbound mobility opportunities, the things learnt during the mobility are recognised. In the academic year 2019/2020, a student from the University of Greifswald, Germany, attended the programme.

Outbound mobility of students is mainly limited by the fact that students are also in an employment relationship at the same time, which prevents them from being absent for a long time.

An international study environment is being developed in the study programme, mainly within the

framework of the annual summer school, in which students from other universities which implement programmes of similar content are invited to participate. With support of the *Erasmus+* programme, there are regular activities with Ernst Moritz Arndt University of Greifswald (*Ernst Moritz Arndt Universität Greifswald*, Germany), where there is exchange of both students and lecturers.

Enclosed:  
Annex 16. Statistical data on students.

### **3.1.5. Substantiation of the development of the joint study programme and description and evaluation of the choice of partner universities, including information on the development and implementation of the joint study programme (if applicable).**

The interuniversity professional Master's study programme "Health Management" of Rīga Stradiņš University and RISEBA University of Business, Arts and Technology has been successfully implemented in Latvian and English since 2013.

The programme has been created in accordance with the principles of the Bologna Declaration. Its strategic aim is a dynamic development of RSU and RISEBA within the Latvian higher education area in order for the degree and diploma awarded to be recognized both in European labour market and for further education in other European countries.

The main study premises are RSU and RISEBA, while students will have the possibility to participate in student exchange or double-degree programmes combining studies in Latvia and abroad. The programme complies with one of the principles of Bologna Declaration – to promote the mobility of students, academic staff and researchers.

The aim of the programme is to prepare highly qualified professionals for manager's work with fundamental interdisciplinary theoretical and practical knowledge at macro, meso and micro level of health care. The joint study programme united competences of both higher education institutions – RSU and RISEBA. RSU implements study course at the level of health system management and organisation (for example, "Health System Design", "Public Health and Epidemiology", etc.), but RISEBA – in the context of operations of health care companies (for example, "Financial Management of Health Care Institutions", "Strategic Human Resource Management", "Leadership and Change Management", etc.).

Therefore, RSU implements about 50% and RISEBA – 50% of study courses.

Joint implementation of the study process is ensured by joint study planning, a common approach in the development of study course materials and organisation of examinations. Uniform methodological materials for the development of Master's thesis and implementation of placement have been developed in the study programme, which create a common basis for academic requirements of the study process. Joint placement defence and national examination boards are established in the study programme, RSU and RISEBA have agreed on a common approach to the submission of a Master's thesis – using the electronic system established by RSU, where papers of students enrolled by RSU and RISEBA students are placed. This harmonises and facilitates the requirements for the submission of papers and provides for uniform access to the members of the examination board.



The study programme has a single Quality Council, the process of the programme has been approved, information is exchanged between the institutions of higher education regarding assessments of student study courses, a single quality monitoring process is implemented. The current issues of implementation of the programme are discussed in the Quality Council of the study programme, which includes representatives of both institutions of higher education, students and employers.

Enclosed:

Annex 15. Compliance of the joint study programme with the requirements of the Law on Higher Education Institutions.

## **3.2. The Content of Studies and Implementation Thereof**

**3.2.1. Analysis of the content of the study programme. Assessment of the interrelation between the information included in the study courses/ modules, the intended learning outcomes, the set aims and other indicators with the aims of the study course/ module and the aims and intended outcomes of the study programme. Assessment of the relevance of the content of the study courses/ modules and compliance with the needs of the relevant industry, labour market and with the trends in science on how and whether the content of the study courses/ modules is updated in line with the development trends of the relevant industry, labour market, and science.**

Descriptions of courses / modules, placement and final papers of the study programme “Health Management” have been developed in good quality and in accordance with the requirements of regulatory enactments, the content is up-to-date, mutually complementary, corresponds to the aims of the programme to prepare highly qualified specialists for management work in health sector, who have fundamental theoretical and practical knowledge and skills in health management and health economics, strategic management of human resources and ensuring a sustainable development of organisation, as well a theoretical knowledge and practical skills in scientific research of health management ensuring the achievement of learning outcomes and compliance with the needs of the industry and scientific trends.

The learning outcomes of the study programme “Health Management” are formulated as knowledge, skills and competences and meet the requirements of the organisation manager’s standard and the seventh level of the Latvian Qualifications Framework (LQF 7), which is defined in the organisation manager’s standard. Like the health sector, the study programme is interdisciplinary, and its aims apply both to mastering the theory of the health management science sector and practical use in health care systems and company management. The content of the study programme is regularly updated with the aim of promoting the topicality and improvement of quality of the programme in accordance with the global development trends and challenges of the health sector to ensure the possibility to provide students with extensive and in-depth theoretical knowledge in health management, to increase students’ skills and competences in the use of modern health management instruments, linking theoretical knowledge with understanding of its use.

Visiting lecturers from Germany are involved in the study programme to teach study courses to students of the Latvian and English flow: *Health Economics*, VVDG\_004 and *Health Technology Assessment*, VVDG\_010.

Study courses are planned in a specific order to ensure sequential and consistent acquisition of knowledge and its practical use, for example, to provide knowledge and understanding by developing the ability of prospective specialists to synthesise knowledge, to promote active attitudes towards studies, to learn theories and conceptual issues of health management, the skills to use them in the performance of management tasks and an understanding of the practical application of different management tools to solve certain problems in resolving specific problems in the field of health, for example, digital learning tools for situation analysis, individual and group work are integrated in study courses “Health System Design” and “Information Management in Health Systems” that are necessary for mastering of the topics included in the study course “Summer School in Health Management” and practical activities.

The study of theoretical development of the health management science sector, approaches and the design and management of health care systems, for example, “Health System Design”, “Health Economics”, “Business Management and Strategy in the Organisation of Health Care”, “Strategic Human Resource Management”, as well as courses on research methods, for example, “Research Methodology” are included in compulsory study courses (Part A) of the study programme. Restricted elective courses (Part B) are more in specific health management areas, for example, “Internship”, “Summer School in Health Management”, which enable the use of theoretical knowledge, skills and competence in practical activities.

In accordance with the changes made to the StP within the licencing procedure, three compulsory elective modules were created replacing the previously implemented placement of 20 CP / 30 ECTS in semester 3.

The content of new study modules has been created in cooperation with foreign institutions of higher education: University of Exeter in the United Kingdom, APOLLON University of Applied Sciences (APOLLON Hochschule der Gesundheitswirtschaft) in Germany and the University of Wuppertal (Bergische Universität Wuppertal) in Germany.

Students are offered to choose the preferable study module to provide knowledge, skills and competences in health management related innovative solutions. To make the programme profitable, any module is implemented if at least 12 students apply. If a smaller number of students apply for a module, they should joint any of the two other modules offered by RSU and RISEBA.

The module **“Economic Modelling in Health Care”** – *it is implemented by RSU*, supplements the content of the study programme with in-depth economic modelling theories and methods and their use in the planning of resources and results of the health sector in the context of limited funding and cost effective spending. Students can master economic modelling methods and skills, their practical use. The study module focuses on the knowledge on the use of the economic modelling approach in decision making at the level of companies and health care system that a manager requires.

New study courses are implemented at RSU for the implementation of the module:

- “Data Analysis in Health Care” in the amount of 4 CP / 6 ECTS;
- “Economic Modelling Techniques” in the amount of 8 CP / 12 ECTS;
- “Process Management in Health Care” in the amount of 8 CP / 12 ECTS.

The module **“Digital Health”** – *RSU* offers students knowledge on data-based digital approaches in the health sector and provide an understanding on the use of electronic resources in resolving

challenges in health care. The module provides knowledge on different elements of digital health, which include IT system architecture and data exchange technologies, electronic medical records (EMR) and electronic health register (EHR) systems, customer relationship management (CRM) systems in health care and financing and accounting systems in health care. New study courses let students understand the nature, use of digital health, and potential solutions in the context of health management matters.

New study courses are implemented at RSU for the implementation of the module:

- “Data Analysis in Health Care” in the amount of 4 CP / 6 ECTS;
- “Introduction to Digital Health” in the amount of 8 CP / 12 ECTS;
- “Application of Digital Health” in the amount of 8 CP / 12 ECTS.

The module **“Entrepreneurship, Health Care Organisation Management and Administration”** – *implemented by RISEBA*, offers students in-depth knowledge in the implementation of new and innovative business approaches.

Three new study sub-modules are implemented for the implementation of the module at RISEBA:

- “Entrepreneurship and Innovations in Health Care” in the amount of 8 CP / 12 ECTS;
- “Business Management” in the amount of 4 CP / 6 ECTS;
- “Competition in Business Management of Health Care” in the amount of 8 CP / 12 ECTS.

The study programme offers also free elective study courses (Part C) mastered by students in the amount of 2 CP / 3 ECTS.

The curriculum generally focuses on such a level of theoretical knowledge and research skills, which allows to continue studies in selected doctoral programmes and to independently improve own knowledge and skills to adapt to professional activity in changeable health sector conditions. The skills acquired enable the use of modern business and health economics approaches, finding one’s way in the international and national regulatory norms of the sector, building and managing a vision for the strategic development of health care companies and systems, arguing and justifying their views on sectoral issues.

As part of international cooperation, an annual international summer school is organised in the Master’s programme “Health Management” every year that attracts visiting lecturers from Germany and the United Kingdom. A pressing health management topic is chosen for summer school every year – modelling of health care processes, data analytics, etc., so that students are familiar with current health sector issues and address them in the international environment with participation of foreign lecturers and other university students.

Representatives of employers (for example, Healthcare Employers’ Association, Riga Hospital 1) are also invited to the final examination board of study programmes (national degree examination and defence of the Master’s thesis), providing an opportunity for feedback on students’ knowledge and preparedness for the work environment.

Graduates of the Master’s study programme “Health Management” ensure an increase in competence in the field of health management by creating and implementing modern and theoretical knowledge-based management of health care institutions, as well as conducting interdisciplinary research and practical projects in the sector. Some graduates work in the Ministry of Health and subordinate institutions, contributing to the creation of Latvia’s health care policy, evidence-based decision-making and implementation of internationally recognised care approaches and conceptual solutions. Research papers of students make a contribution to the development of the health sector. Research papers analyse current health sector problems in Latvia, as a result of which recommendations are provided for solving existing problems based on data analysis and

economic calculations. This type of research is important for the social, economic and national economy development of Latvia as a whole.

Enclosed:

Annex 17.1. Compliance of the study programme with the national educational standard.

Annex 18.1. Mapping of the study courses for the achievement of learning outcomes of the study programme.

Annex 19. Planning of the study programme (for each type and form of the implementation of the study programme).

Annex 20. Description of study courses.

**3.2.2. In the case of master's and doctoral study programmes, specify and provide the justification as to whether the degrees are awarded in view of the developments and findings in the field of science or artistic creation. In the case of a doctoral study programme, provide a description of the main research roadmaps and the impact of the study programme on research and other education levels (if applicable).**

To ensure that Master's degrees are awarded to students based on the modern developments of the health sector, study content is regularly updated and the latest scientific and academic literature on health management is used. The content of each study course includes information on the health management research methods, tools relevant to the respective topic and their use to raise students' awareness of the theoretical knowledge of health management in practice for students and to gradually learn research methods. Study courses cover the latest theories and conceptual solutions of health management science. For example, materials (simulations, situation analyses, scientific articles) from *Harvard Business Publishing Education* are used. The new study modules "Digital Health" and "Economic Modelling" enable students to better understand the health sector's current developments, with an emphasis on learning the multidisciplinary change management approach and the knowledge of the sector's digital transformation.

The development of Master's thesis is based on the analysis of conceptual approaches and solutions to health management science, and students are recommended topics of research papers, which are updated annually on the basis of recommendations from industry institutions, including the Ministry of Health, the National Health Service, clinical university hospitals, etc. The latest scientific publications should be used in the Master's thesis (the Regulations for Writing a Master's Thesis provide that at least five scientific sources not more than five year old must be used). Conclusions and recommendations in Master's theses are prepared in the context of conceptual solutions of health management science, they confirm the conformity of the degree obtained by students with the latest achievements and knowledge of health care and management science.

**3.2.3. Assessment of the study programme including the study course/ module implementation methods by indicating what the methods are, and how they contribute to the achievement of the learning outcomes of the study courses and the aims of the study**

**programme. In the case of a joint study programme, or in case the study programme is implemented in a foreign language or in the form of distance learning, describe in detail the methods used to deliver such a study programme. Provide an explanation of how the student-centred principles are taken into account in the implementation of the study process.**

The implementation of the study process in the programme is regulated by a tripartite study contract, which is signed by both institutions of higher education and the student. Student documents are administratively prepared by the base institution of higher education, but the implementation of study courses take places according to the regulations of the relevant institution of higher education. A unified group of students is formed in the study programme regardless of the institution of higher education, where the student was enrolled. Applicants are free to enrol in either of the higher education institutions involved in the implementation of the programme.

The study programme is implemented between institutions of higher education in the form of modules that are sequential by content with a study course examination at the end of the implementation thereof. Study modules and courses are implemented gradually one after another, but not more than two study courses are implemented at the same time. RSU implements study courses at the health sector management level and RISEBA – at the health organisation management level. The study programme starts with study courses implemented by RSU in the fields of public health, health system design and theory of legal aspects of the management of the sector, which provide basic knowledge on the activities of the health sector. Further courses already focus on detailed, specific areas of the system and company activity – human resources management, quality management, improving the efficiency of management processes, etc. Each study course is mapped against a specific study programme outcome or outcomes. Each course also focuses on the acquisition of transversal skills such as presentation, discussion and reasoning skills, problem and case analysis, etc.

Study course materials are available on the e-learning website of each institution of higher education, regular exchange and collection of study administrative information takes place between institutions of higher education. Each institution of higher education maintains the information on the overall academic achievements and circulation of students. Issues to be solved jointly are discussed in the Quality Council of the study programme.

The study courses mainly use cumulative assessment to promote the systematic learning of the content of the study course by students, as well as stimulate the active learning approach in the form of both individual and group work.

It is intended to diversify study methods in study modules to promote the ability of students to achieve the following learning outcomes:

- Apply the principles of active learning – to enable students to speak more openly, think more creatively and engage more in the learning process;
- Apply active learning methods – critical thinking, active listening skills, engagement, to use in-depth case analysis, game-based learning platforms, etc.;
- To plan joint lectures and classes with students of cooperating institutions from other countries – joint case studies, group work, discussion of learning outcomes;
- To promote the development of students' analytical and research skills by involving students in various, including international, projects in the health sector.

A student-centred approach is implemented in the study process, the aim of which is to develop the

autonomy and independence of the student, to transfer responsibility for the learning path into the hands of students, giving them the skills and basis for learning a specific study course and topics. The study organisation focuses on skills and practices that ensure solving problems and cases independently.

The learning process in this study programme includes lecture, practical examples, group tasks, interactive discussions, writing individual papers and lectures given by the visiting lecturers representing health sector. Within the framework of the study programme, studies are conducted in work groups and as self-learning which is a significant part of all programmes. This requires extensive reading of syllabus, preparation of practical work, and active and analytical participation in discussions. The studies are based on participation, and the study group resembles a community where students share and discuss their ideas. Computer work and simulations, role playing and studying videos are all an integral part of the study process. Student participation in scientific conferences and seminars is also stimulated. The study process focuses on practical studies. The theories and models are learned and taught through a practical application in health management matters – practical projects and examples, analysis of health economics, organisation and enterprise management and global health issues. Master's thesis is linked to actual health management matters. Subject of the master's thesis is connected to operational direction of the health sector institutions combining both academic and practical research.

English as both study and assessment language, participation of visiting lecturers, student exchange in study groups as well as use of textbooks and collections of articles published by various foreign authors contribute to the international environment of this programme and preparedness for work in international enterprises and health sector institutions and enterprises. Exchange of students of English and Latvian programmes and joint discussions and seminars are also practiced extending the students' field of view.

**3.2.4. If the study programme envisages an internship, describe the internship opportunities offered to students, provision and work organization, including whether the higher education institution/ college helps students to find an internship place. If the study programme is implemented in a foreign language, provide information on how internship opportunities are provided in a foreign language, including for foreign students. To provide analysis and evaluation of the connection of the tasks set for students during the internship included in the study programme with the learning outcomes of the study programme (if applicable).**

Students' placement is an essential part of the study programme, which is implemented at the end of semester 2. Following the transition from a professional to academic programme, the volume of placement changed from 6 CP / 9 ECTS to 4 CP / 6 ECTS, and students can choose to have their placement in a health care organisation, or choose participation in the international summer school organised within the programme, which is implemented in cooperation with universities in Germany (APOLLON University of Applied Sciences and the University of Wuppertal).

An international summer school as placement has been introduced during the Covid-19 restrictions, when not all students could have access to placement on site. A pressing health management topic is chosen for summer school every year – modelling of health care processes, data analytics, etc., so that students are familiar with current health issues and address them in the international environment with participation of foreign lecturers and other university students. At the end of the

summer school, students present and defend their group work results, which are assessed with a grade. Information on previously organised summer schools in Latvian in [2018](#), [2021](#) and [2022](#) and in English in [2020](#), [2021](#) and [2022](#) is available on the RSU website.

The organisation of placement is implemented as follows: the student coordinates the topic of placement with the institution of higher education and the organisation and during placement implements a project or research essential to the organisation, using the knowledge acquired in theory on the specific matter, with the aim of linking the task of the placement with the outcomes of the study programme. The main tasks of placement are: to acquire practical skills in health management policy making matters, company business development strategy making and business process management, communication and information management, personnel management and marketing matters. The placement approach is related to the implementation of a change management project in one of the companies in the sector.

A list of potential placement organisations and placement topics has been created in the study programme for more efficient placement, and many recommendations for topics have been received from these organisations. Examples of placement sites include the Ministry of Health, the National Health Service, the Emergency Medical Service, clinical university hospitals and regional medical institutions, etc. A student may choose a placement site and a topic at his or her discretion, or he or she has placement at his or her workplace by agreeing on the topic in advance with the head of the programme, which ensures that placement is linked to learning outcomes.

Students of the programme in English may choose a placement site in their home country, Latvia or any other country. If an international student wishes to have placement in Latvia, the institution of higher education looks for a placement organisation that is prepared to ensure placement in English, for example, such organisations are the Centre for Disease Prevention and Control, also private medical treatment institutions, etc.

Enclosed:

Annex 9. Description of the organisation of placement of the students.

### **3.2.5. Evaluation and description of the promotion opportunities and the promotion process provided to the students of the doctoral study programme (if applicable).**

Not applicable.

### **3.2.6. Analysis and assessment of the topics of the final theses of the students, their relevance in the respective field, including the labour market, and the marks of the final theses.**

The topics of the final papers of students of the programme are related to the main challenges of the management of the health sector and institutions, exploring their theoretical bases and solutions using the knowledge and research methods acquired during studies. The list of topics of final papers is regularly updated to cover topics that are topical at both global and national level,

including the thematic areas of projects implemented by the university. This list includes the topics recommended by the Ministry of Health and its subordinate institutions, including placement organisations, therefore, they reflect the latest development in the labour market. Every year, directors of the programme from both institutions of higher education review the topics of final papers of students in the programme, which are approved by the Council of the RSU Faculty of Public Health and Social Welfare. The current research topics of the study programme are:

- design and performance assessment of health systems;
- health and pharmaceutical policy;
- economic evaluation of health and medical technologies;
- health care quality and patient safety systems;
- economic efficiency of health care;
- safety of health care workers;
- human resources management;
- integrated health care;
- management of chronic patients;
- digital health;
- information management in the health system;
- export of health services;
- communication and marketing in health care.

Final papers have so far received only positive assessments (see Annex 22). To successfully defend a final paper, there is a pre-defence process during which the student presents the results of his or her research and receives recommendations from the commission to improve the paper. As a result of pre-defence, the interuniversity commission takes a decision on the further forwarding of the final paper to defence.

Students have the opportunity to carry out their research and engage in research projects carried out by lecturers of the programme and cooperate in international research networks.

Enclosed:

Annex 22. Topics of students' final papers.

### **3.3. Resources and Provision of the Study Programme**

**3.3.1. Assessment of the compliance of the resources and provision (study provision, scientific support (if applicable), informative provision (including libraries), material and technical provision, and financial provision) with the conditions for the implementation of the study programme and the learning outcomes to be achieved by providing the respective examples.**

The resources of the study programme are provided by the library resources, databases of scientific literature, e-books and periodicals at the disposal of RSU. Lecturers of study courses update the list of recommended readings annually and contact the RSU Library to make sure that new sources are purchased, if necessary. Software acquisition needs are included in the budget plan of the relevant



structural unit.

A special software *MedModel* is purchased annually, as well as open source software *R* is used for the needs of the study programme for modelling of health care processes.

The study programme uses a lot of open access resources: open-access scientific publications and editions and reports of international organisations such as the European Commission, the World Health Organisation, etc. For research purposes, students use data from international databases, as well as data at the disposal of the Ministry of Health, the National Health Service and the Centre for Disease Prevention and Control, which can be received upon request.

Students are advised to use reports from the international European Commission and the World Health Organisation Network on health systems and policies (*European Observatory on Health Systems and Policies*) on current health sector topics (<https://eurohealthobservatory.who.int/>), as well as to use reports on each country's health systems *Health Systems in Transition (HiT) series* (<https://eurohealthobservatory.who.int/publications/health-systems-reviews>), which provide a basis for analysing and synthesising information on comparisons of health systems in a global context.

To be able to link the theoretical knowledge acquired to practice, students are recommended to participate in Latvian and international sectoral conferences, on which students prepare a report, which is discussed in groups to implement interactive learning methods.

The study process and communication are organised in the e-learning environment using an interactive and student-centred learning approach.

Enclosed:

Annex 23.2. Assessment of the informative and methodological provision regarding library resources for the implementation of the Public Health and Social Welfare Faculty study programmes in accordance with the requirements of the guidelines.

Annex 23.3. Assessment of the information and methodological base on IT resources.

**3.3.2. Assessment of the study provision and scientific base support, including the resources provided within the framework of cooperation with other science institutes and higher education institutions (applicable to doctoral study programmes) (if applicable).**

Not applicable.

**3.3.3. Indicate data on the available funding for the corresponding study programme, its funding sources and their use for the development of the study programme. Provide information on the costs per one student within this study programme, indicating the items included in the cost calculation and the percentage distribution of funding between the specified items. The minimum number of students in the study programme in order to ensure the profitability of the study programme (indicating separately the information on each language, type and form of the study programme implementation).**

The StP is planned to be financed from state budget funds and the funds of individuals and legal

entities setting the tuition fee in the Latvian flow of EUR 3000, in the English flow – EUR 4100 per year of studies. The study programme in the Latvian flow has state funding for 18 budget funded places. The number of students planned to be achieved in the Latvian flow in two years of studies is 64 students, enrolling 36 students in the first year, planning a drop-out of 8 students in the second year. The number of students planned to be achieved in the English flow in two years of studies is 22 students, enrolling 12 students in the first year, planning a drop-out of 2 students in the second year. Such a number of students is optimal to ensure a high-quality study process and to make the study programme cover its implementation, as well as development costs.

The funding is used for staff remuneration, attraction of visiting university lecturers, taxes, maintenance of IT infrastructure, purchase of equipment and devices and study visit costs. In addition to the direct costs of the implementation of lectures and classes, the StP must cover the infrastructure maintenance costs (facilities, IT solutions) and other RSU common resources used in StP (Student Service, Library, organisation of the study process, grant for the Student Union and other support and administrative functions).

StP is implemented by the RSU Faculty of Public Health and Welfare Health Management Lecturer Group Public and Department of Public Health and Epidemiology and Faculty of Medicine Department of Clinical Skills and Medical Technologies and Statistical Unit and Dean's office of the Faculty of Law. Remuneration of the academic staff in the first year in the Latvian flow of StP is planned to be approximately 32 thousand EUR and approximately 10 thousand EUR in the English flow study programme.

*Table 2. Information on student costs*

**Costs of the study programme in the Latvian flow**

<b>Name</b>	<b>Result</b>
Average income per student, EUR	3220
Average cost per student, EUR	1430
Academic staff, %	49
Department resources, %	12
Scholarship costs, %	4
Fixed costs, %	2
Overheads, %	33

**Costs of the study programme in the English flow**

<b>Name</b>	<b>Result</b>
Average income per student, EUR	2837
Average cost per student, EUR	2356

Academic staff, %	58
Department resources, %	24
Fixed costs, %	3
Overheads, %	15

The study programme is cost-effective. The state budget funding for 1 budget place from 1 September 2023 is EUR 3438 per academic year and 16 state-funded places are provided. The programme currently has an average of 54 students per academic year, which ensures a positive financial result. In order to maintain profitability, the minimum number of students per group, as set out in the RSU internal regulations, of 12 students must be enrolled in the study programme each year.

### 3.4. Teaching Staff

**3.4.1. Assessment of the compliance of the qualification of the teaching staff members (academic staff members, visiting professors, visiting associate professors, visiting docents, visiting lecturers, and visiting assistants) involved in the implementation of the study programme with the conditions for the implementation of the study programme and the provisions set out in the respective regulatory enactments. Provide information on how the qualification of the teaching staff members contributes to the achievement of the learning outcomes.**

Breakdown of the programme into study courses between the institutions of higher education:

- courses taught by RSU – 18 (65 CP / 94.5 ECTS);
- courses taught by RISEBA – 17 (41 CP / 61.5 ECTS).

The study courses “Placement”, “Pre-Defence of Master’s Thesis” and “Master’s Thesis” are implemented jointly, single commissions of representatives of both institutions of higher education are established for this purpose.

The composition of the academic staff ensuring the study courses taught by RSU is extensive.

Assistant Professor *Ph. D.* **Daiga Behmane**, Doctor of Science in Economics and Business, currently leads the Health Management Lecturer Group of the RSU Faculty of Public Health and Social Welfare. Her academic and research activity covers health care management, health and pharmaceutical policy, health economics and economic assessment of health technologies. Daiga Behmane has created and leads the Master’s programme “Health Management” at Rīga Stradiņš University, and has developed several study courses for Master’s and doctoral study programmes, for example, “Health System Design”, “Health Economics” and “Health Technology Assessment”. She is involved in international health research projects and networks in the field of health management and economics, including *Horizon* and *EU Cost* action projects. Daiga Behmane leads the Latvian Health Economics Association, which popularises the importance of health economics and implements projects in the state and private sector. Daiga Behmane also acts as an expert of

the World Health Organization in health and pharmaceutical policy and health economics matters.

Lecturer **Mg. Alina Dūdele**, Master's degree in Public Health majoring in Health management, currently lecturer of the Health Management Lecturer Group of the RSU Faculty of Public Health and Social Welfare. Her academic and research activity covers health care management, health economics, health policy, value-based health care. Alina Dūdele reads study courses "Health Economics" and "Basics of Finance Management" of the Rīga Stradiņš University Master's programme "Health Management". Alina Dūdele graduated from the doctoral study programme "Medicine" at Rīga Stradiņš University. She is involved in international research projects of the health care system, including in the network *European Observatory on Health Systems and Policies Health Systems and Policy Monitor (HSPM)*. Alina Dūdele participates in health care system development projects in the state and private sector as experts. The lecturer combines her academic activity with practical work in the sector, fulfilling duties of the economic and development director of a medical treatment institution, which enables to offer students placement opportunities and to supervise their research papers finding practices uses for the results.

Lecturer **Igors Trofimovs**, physician, lecturer of the Health Management Lecturer Group of the RSU Faculty of Public Health and Social Welfare. He received additional education in public health and health technology assessment and management Master's programmes, quality management and quality assessment study programmes. His academic activities cover health care quality assessment and improvement, health care management, change and project management in health care. Igors Trofimovs has developed several study courses for Master's study programmes, such as "Quality Assurance and Improvement in Healthcare" and "Efficiency and Quality Management of the Organisation". He is involved in international health organisations and study programmes in the fields of health care quality management, evaluation and improvement, as well as project management, change management in health and social care. Igors Trofimovs is a Member of the Board of the Latvian Health Care Association and a member of the Latvian Health Economics Association.

Lecturer **Ph.D. Ieva Bikava**, candidate to the degree of the doctor of science in the sub-sector of political science: management and administration. Previously obtained a Master's degree in computer sciences and a professional qualification in system analytics. Practical activity and experience is related to the introduction of digital health solutions, working as a leading business analyst in the development of various public administration information systems, working with the National Health Service, Emergency Medical Service and Centre for Disease Prevention and Control. Performs pedagogical activity at RSU since her doctoral studies in 2015 – initially at the Department of Political Science developing new study courses: "Lobbying of Interests in Latvia and Europe", "Interest Defence Practices in Latvia", "E-State and Digital Governance". Since 2015, teaches a study course "Information Management in Health Systems" in the Health Management Lecturer Group in Latvian and English. Acted as a researcher in research projects at various scale, author of several publications on the topics of digital health and health policy.

Visiting professor **Ph. D. Olav Göetz** with specialisation in general business and health care administration and health economics combined his pedagogical activity with academic work in the *APOLLON* University of Applied Sciences in Germany. Olav Göetz has practical work experience in experience in analysing business processes and efficiency of health companies using methods of economic modelling and simulation. They are successfully used in the study process and when supervising students' Master's theses on health economics and business management research topics. The professor has organised cooperation between students from both institutions of higher education, both in summer school and in a joint discussion of student research results. Further Professor's activities relate to the development of new study modules at RSU in the fields of digital health and health data analytics.

Assistant Professor **Karina Palkova**, Doctor of Law, has improved and reads the study course “International Health Law”. The lecturer has perfected herself in academic work – became a vice-dean of the Faculty of Law, created new courses in medical law. At the same time, she also leads the Project Development and Research Laboratory of the Faculty of Law. The Assistant Professor is an expert in her field, the practical directions of her activities relate to the work of advocates and arbitrator, her research topics – medical and patient rights, artificial intelligence in health care, law and ethics.

Visiting professor **Sebastian Rachuba** from the University of Wuppertal *Bergische Universität Wuppertal* in Germany is involved in the implementation of the international summer school. His academic and research activities focus on research of health care processes and capacity planning of health care facilities using economic modelling and simulation techniques.

From 1 January 2017 to 1 October 2022, 13 lecturers of the Master’s study programme “Health Management” participated in continuing education activities of the Centre for Educational Growth (CEG) attending more than 100 training activities of different content. The teachers of the study programme “Health Management” have devoted a total of 1761 academic hours to the mastering of continuing education activities.

The lecturers participated in the following CEG activities: Creation of animated visual studio materials; Reference management tool *EndNote*; Remote work of student groups with the *Miro* tool; *Collaboration and Partnership Towards Professional and Sectoral Development: Local, National, Transnational*; *Contextualizing the use of Webinar in Higher Education*; *Creating Engaging and Interactive Classrooms through Active Learning Techniques*; Digital Darwinism – what it means for us each and our institution; Think tank: feedback as a sources of cognition and possibility to improve oneself; Think tank: How to assess to learn?; Creation of electronic tests; The potential of immersive technologies for effective learning strategies; Interactive presentations and real-time feedback in the *Mentimeter* tool; Improvisation in pedagogical activities; Potential of conflict for building cooperation; Research methodology and statistical processing of data; Visualization of content in presentations; Assessment approaches and types of examinations in remote studies; Creating videos: complex in a simple and short way and many other.

Study courses taught by RISEBA are ensured by 13 lecturers, of whom seven have a doctoral degree (54%). Three lecturers of the business environment, three – from the academic environment.

Enclosed:

Annex 24.7. Analysis of the composition of the teaching staff.

### **3.4.2. Analysis and assessment of the changes to the composition of the teaching staff over the reporting period and their impact on the study quality.**

The higher education institutions purposefully take measures so that changes in the teaching staff do not positively affect the quality of implementation of the study programme and the compliance of the study programme with the requirements specified in regulatory enactments.

The development plan of teaching staff of the programme includes the attraction of foreign lecturers and the increase of qualification of existing lecturers.

Academic staff of the programme is stable, with a constant potential for improvement.

Visiting professor *Dr. rer. pol.* **Olav Göetz** from the *APOLLON* University of Applied Sciences in Germany has been involved in teaching of the programme in the reporting period. Visiting professor *Dr. rer. pol.* Olav Göetz is an expert in economics, business administration and health care. His academic and research activity covers health care business management, health economics and health management. Professor Göetz's research particularly focuses on the management of health care processes, modelling and simulation of processes. He also supports different companies in the development of their organisation with human resources management, cost analysis in health care institutions and financing of health systems as a basis. The professor is a member of several international professional association.

In the study programme, visiting professor Olav Göetz teaches study courses "Health Economics" and "Health Technology Assessment" in English, as well as supervises the development of students' final papers and actively participate in the organisation of an international summer school in health management of the programme.

In 2020, the head of the programme, Assistant Professor **Daiga Behmane**, defended her doctoral thesis and obtained a doctoral degree of science (*Ph. D.*) in economics and business. Her research interests focus on stimulating the effectiveness and competitiveness of health care. In 2022, Daiga Behmane successfully graduated from the Higher education leadership program by Riga Technical university and Massachusetts Institute of Technology, Abdul Latif Jameel World Education Lab, USA. Mastering of international education practices makes it possible to increase the quality of the study programme and implement it in the environment meeting international requirements. Further plans are related to the involvement of foreign teachers in the creation of new study courses and modules and the development of the summer school. During the reporting period, Daiga Behmane was involved in the national research programme on the impact of Covid-19 on the health care system and is a co-author of the publication Kursīte, M., Stars, I., Strēle, I., Behmane, D., et al. (2022). *A mixed-method study on the provision of remote consultations for non-communicable disease patients during the first wave of the Covid-19 pandemic in Latvia: lessons for the future.* *BMC Health Serv Res.* 22, 263 (2022). <https://doi.org/10.1186/s12913-022-07634-x>.

In the European Commission project *EC Cost Action Programme CA15222 / European Network for cost containment and improved quality of health care, 2016-2020* Daiga Behmane is a co-author of the publication Swedberg, K., Cawley, D., Ekman, I., Behmane, D. et. al. (2021). *Testing cost containment of future healthcare with maintained or improved quality. The COSTCARES project, Science Reports, Vol. 4, Issue 2.* <https://doi.org/10.1002/hsr2.309>

During the reporting period, lecturer **Alina Dūdele** graduated from the RSU doctoral study programme "Medicine" and is currently working on her doctoral thesis and publications for the evaluation of effectiveness of health care in case of myocardial infarction.

Assistant Professor **Karina Palkova** has created a doctoral study programme of a new type "Social Sciences", which is based on a multi-professional approach for research of social matters, incl. by including individual doctoral directions in health management. The Assistant Professor develops a research direction – observation of patient rights in digital systems and data processing.

**3.4.3. Information on the number of the scientific publications of the academic staff members, involved in the implementation of doctoral study programme, as published during the reporting period by listing the most significant publications published in Scopus or WoS CC indexed journals. As for the social sciences, humanitarian sciences, and**

**the science of art, the scientific publications published in ERIH+ indexed journals or peer-reviewed monographs may be additionally specified. Information on the teaching staff included in the database of experts of the Latvian Council of Science in the relevant field of science (total number, name of the lecturer, field of science in which the teaching staff has the status of an expert and expiration date of the Latvian Council of Science expert) (if applicable).**

Not applicable.

**3.4.4. Information on the participation of the academic staff, involved in the implementation of the doctoral study programme, in scientific projects as project managers or prime contractors/ subproject managers/ leading researchers by specifying the name of the relevant project, as well as the source and the amount of the funding. Provide information on the reporting period (if applicable).**

Not applicable.

**3.4.5. Assessment of the cooperation between the teaching staff members by specifying the mechanisms used to promote the cooperation and ensure the interrelation between the study programme and study courses/ modules. Specify also the proportion of the number of the students and the teaching staff within the study programme (at the moment of the submission of the Self-Assessment Report).**

Cooperation of teaching staff of the study programme is developed in several directions: mutual improvement of the content of study courses, takeover of best experiences, discussion of teaching methods and learning outcomes and results of student questionnaires.

To take over the best experience, once per academic year each lecturer presents to other lecturers of the programme his or her experience in the implementation of study courses and his or her innovations in the development of study course materials. The main changes have been made for improvement of study course materials in e-studies and improvement of the study course assessment approach.

Pairs of lecturers are formed in the programme for achieving the results of unified learning outcomes, who jointly read the study course, supplement the materials of the study course, may take over teaching of the study course among themselves. This approach is being introduced gradually and is already being implemented in the study courses "Health System Design" and "Health Economics". Observation of teaching is used to take over study experience and implementing constructive proposals to improve the quality of studies. Each lecturer of the programme participates in the study course of another lecturer at least once a semester. All lecturers of the programme participate in the defence of the final papers of students.

Lecturers from foreign cooperating universities and RSU are involved in the implementation of

study courses “Health System Design” and “Health Economics”, while lecturers from RSU and RISEBA cooperate in study courses “Human Resources Management”, “Pharmaceutical Policy and Management” and “Health Communication and Marketing” to provide additional resources and to form teams for implementation of teachers’ courses, facilitating transfer of academic experience and knowledge and transfer of study content. Lecturers of RSU and RISEBA are involved in the implementation of joint practical classes, the organisation of examination of students’ knowledge, adaptation and updating of study materials. Experience of foreign lecturers is used in the creation of theoretical part and framework of studies, introduction of new teaching methods and implementation of the remote study format. In each study course, lecturers organise visiting lectures of their foreign cooperation partners on the topical issues of the course.

The ratio of the number of students and teaching staff in the study programme is: 120 students and 15 RSU lecturers. The ratio of the number of students and teaching staff is 8.



# Annexes

III - Description of the Study Programme - 3.1. Indicators Describing the Study Programme		
Sample of the diploma and its supplement to be issued for completing the study programme	24.1_Anx_diploma and supplement_Health_manag.pdf	24.1_Diploms un pielikums_KAMSP Ves_vad.pdf
For academic study programmes - Opinion of the Council of Higher Education in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions (if applicable)	AIP pielik_prasiba iznemta no AL.pdf	AIP pielik_prasiba iznemta no AL.pdf
Compliance of the joint study programme with the provisions of the Law on Higher Education Institutions (table) (if applicable)	15_Anx_Compliance of the joint StP_Health_Manag.pdf	15_pielik_Kopigas_programmas_atbilstiba_Ves_Vad.pdf
Statistics on the students in the reporting period	16_Anx_Statistical data_students_Health_Manag.pdf	16_pielik_Studejoso statistika_Veselibas vadiba.pdf
III - Description of the Study Programme - 3.2. The Content of Studies and Implementation Thereof		
Compliance with the study programme with the State Education Standard	17.1_Anx_Compl_with_Nat_Ed_Stand_Health_Manag.pdf	17.1_pielik_Atbitst_valsts_izgl_stand_KAMSP Ves_vad.pdf
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard or the requirements for professional qualification (if applicable)		
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)		
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	18.1_Anx_Stud_course mapping to achieve learn_outcomes_Health_Manag.pdf	18.1_pielik_Stud_kursu_kartejums_stud_rezult_sasn_Ves_vad.pdf
The curriculum of the study programme (for each type and form of the implementation of the study programme)	19_Anx_course_plan_Health_management.pdf	19_pielik_StP_Veselibas vadiba_planojums.pdf
Descriptions of the study courses/ modules	20_Anx_Study_course_description_Health_Management.pdf	20_pielik_Kursu_apr_Veselibas_vadiba.pdf
Description of the organisation of the internship of the students (if applicable)	9_Annex_Placement_Organisation_Health_Management.pdf	9_Pielikums_Prakses_organizacija_Veselibas_vadiba.pdf
III - Description of the Study Programme - 3.4. Teaching Staff		
Confirmation that the academic staff of the doctoral study programme includes not less than five doctors, of which at least three are experts approved by the Latvian Council of Science in the branch or sub-branch of science in which the study programme intends to award a scientific degree (if applicable)		
Confirmation that the academic staff of the academic study programme complies with the requirements specified in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions (if applicable)	24.7.1_Annex_Cert_compliance_KAMSP_Health_Management_Akad_staff_AL_55.1.3.pdf	24.7.1_pielik_Apniecinajums_KAMSP_Veselibas_vadiba_Akad_pers_atbilstiba_AL_55.1.3.edoc

# Residency in Medicine (50721)

Study field	<i>Health Care</i>
ProcedureStudyProgram.Name	<i>Residency in Medicine</i>
Education classification code	<i>50721</i>
Type of the study programme	<i>Second level higher higher education for obtaining the qualification of a medical specialist and for obtaining the qualification of a dental specialist.</i>
Name of the study programme director	<i>Ilze</i>
Surname of the study programme director	<i>Grope</i>
E-mail of the study programme director	<i>Ilze.Grope@rsu.lv</i>
Title of the study programme director	<i>Profesore, Dr. Med.</i>
Phone of the study programme director	
Goal of the study programme	<i>To ensure the acquisition and development of theoretical knowledge and practical skills for the training of high quality and internationally competitive doctors for specialty certification, in accordance with the regulatory documents of the Republic of Latvia and the European Union, using an approach consistent with international standards of medical education.</i>
Tasks of the study programme	<ol style="list-style-type: none"> <li><i>1. To promote and support the acquisition and development of student's in-depth theoretical knowledge in the aetiology, pathogenesis, diagnosis, prevention, and treatment of diseases, with particular emphasis on complex and uncommon pathologies.</i></li> <li><i>2. To deepen the understanding of biomedical, ethical matters and communication skills.</i></li> <li><i>3. To improve and strengthen practical skills in patient examination in both outpatient and inpatient settings, using modern medical technologies.</i></li> <li><i>4. To develop skills in selecting treatment methods, applying them and solving problems.</i></li> <li><i>5. To encourage and support the development of medical residents' creative, research, and teaching skills, as well as to ensure the development and improvement of other interdisciplinary and transversal competences and knowledge necessary for a doctor.</i></li> <li><i>6. To promote international communication and exchange of experience in medical resident education.</i></li> </ol>

Results of the study programme	<p>1. According to the specialty, sub-specialty or additional specialty, the student is able to:</p> <p>A. demonstrate a thorough knowledge and understanding of the regularities of the structure and functionality of a healthy and sick person;</p> <p>B. understand the impact of diseases on the body in different situations, their nature and the consequences they have for human health as a whole and for individual human systems, creatively predict disease progression, complications, mechanisms of outcomes and interrelationships between systems, defining the conditions that promote or inhibit disease progression;</p> <p>C. to formulate specific tasks, optimally selected modern medical remedies or diagnostic methods in various conditions to achieve the patient's maximum health well-being.</p> <p>2. According to the specialty, sub-specialty or additional specialty, the student is able to:</p> <p>A. explain and discuss diseases or health care problems, diagnosis or identification thereof, treatment or solutions thereto, and the possible outcomes, outlining their nature and the consequences they have for human health in general and for each human organ system individually.</p> <p>3. According to the specialty, sub-specialty or additional specialty, the student is able to:</p> <p>A. independently apply theory and problem-solving skills to assess the health of the patient in general, as well as the state of each system; in case of health disorders, able to identify the nature and causes thereof, explain the circumstances of the occurrence thereof, to differentiate and explain differences among diseases.</p> <p>B. integrate the knowledge of medical branches into a unified vision of the modern possibilities of the sector, diagnosis group or patient's health care.</p> <p>4. According to the specialty, sub-specialty or additional specialty, the student is able to:</p> <p>A. independently direct the development of one's competence, use modern self-improvement techniques, including simulation-based educational development methods, to use patient-safe tools, methods and measures in daily work.</p> <p>5. According to the specialty, sub-specialty or additional specialty, the student is able to:</p> <p>A. organise health care for the patient using effective teamwork principles, modern health care system capabilities, creatively adapting them to individual patient needs, finding ethical and modern solutions for the benefit of the patient.</p> <p>B. plan, in an integrated manner, a range of activities, including medical interdisciplinary activities, aimed at improving or enhancing the health wellbeing of the sector, patient, or diagnose group, or individual patients.</p> <p>6. According to the specialty, sub-specialty or additional specialty, the student is able to:</p> <p>A. independently use the theory and problem-solving skills to evaluate patient's health in general, as well as the condition of each system. In case of health disorders, able to identify the nature and causes thereof, explain the circumstances of the occurrence thereof, to differentiate and explain differences among diseases.</p> <p>7. According to the specialty, sub-specialty or additional specialty, the student is able to:</p> <p>A. integrate knowledge from different fields of medicine, to use it in practice in a manner optimal for the patient or the sector, to participate in research and to contribute to the creation of new diagnostic or therapeutic methods, to demonstrate understanding and ethical responsibility for the results of one's activities.</p> <p>8. According to the specialty, sub-specialty or additional specialty, the student is able to:</p> <p>A. educate the public, doctors of other specialties and nursing staff, using the acquired knowledge, skills and competences;</p> <p>B. to carry out scientific research or the development of methods appropriate to the sector, producing a product of value to society, the sector or the profile, demonstrating understanding and ethical responsibility for the results of one's activities.</p> <p>9. According to the specialty, sub-specialty or additional specialty, the student is able to:</p> <p>A. independently formulate and critically analyse complex medical situations, apply the latest scientific achievements, organise medical and/or diagnostic care, and solve problems using a creative approach and a complex view of the problem.</p>
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Final examination upon the completion of the study programme	National examination
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## Study programme forms

### Full time studies - 2 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	2
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	96
Admission requirements (in English)	<i>Medical Doctor's degree and qualification in the primary speciality: psychiatrist or neurologist, or gynaecologist, obstetrician or urologist, or family doctor (general practitioner) or internist, or paediatrician, or geriatrician, or forensic physician, or dermatologist, venereologist or psychotherapist, or physical and rehabilitation medicine doctor</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>sexologist, sexopathologist</i>

### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

### Full time studies - 2 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	2
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	92
Admission requirements (in English)	<i>Medical Doctor's degree and qualification in primary speciality: radiologist</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>interventional radiologist</i>

### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

### Full time studies - 4 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	4
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	192
Admission requirements (in English)	<i>Medical Doctor's degree</i>

Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>Clinical Microbiologist</i>

### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

### Full time studies - 2 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	2
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	96
Admission requirements (in English)	<i>Medical Doctor's degree and qualification in primary speciality: traumatologist, orthopaedist</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>Spinal Surgeon</i>

### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

### Full time studies - 4 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	4
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	192
Admission requirements (in English)	<i>Medical Doctor's degree and qualification in primary speciality: neurologist or paediatric neurologist</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>neurophysiologist</i>

### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

### Full time studies - 4 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	4
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	192
Admission requirements (in English)	<i>Medical Doctor's degree</i>

Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>acupuncture doctor</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 2 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	2
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	96
Admission requirements (in English)	<i>Medical Doctor's degree and qualification in primary speciality: internist, or endocrinologist, or gynaecologist, obstetrician, or urologist</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>andrologist</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 4 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	4
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	192
Admission requirements (in English)	<i>Medical Doctor's degree and qualification in the primary speciality: internist or family doctor (general practitioner), or dermatologist, venereologist, otolaryngologist, paediatrician or pulmonologist</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>allergologist</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 1 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	1

Duration in month	0
Language	latvian
Amount (CP)	48
Admission requirements (in English)	Medical Doctor's degree and qualification in any primary speciality
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	algologist

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 5 years - latvian

Study type and form	Full time studies
Duration in full years	5
Duration in month	0
Language	latvian
Amount (CP)	240
Admission requirements (in English)	Medical Doctor's degree
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	anaesthetist, emergency physician

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 5 years - latvian

Study type and form	Full time studies
Duration in full years	5
Duration in month	0
Language	latvian
Amount (CP)	240
Admission requirements (in English)	Medical Doctor's degree
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	occupational physician

#### Full time studies - 5 years - latvian

Study type and form	Full time studies
Duration in full years	5
Duration in month	0
Language	latvian
Amount (CP)	240
Admission requirements (in English)	Medical Doctor's degree

Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>vascular surgeon</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 3 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	<i>3</i>
Duration in month	<i>0</i>
Language	<i>latvian</i>
Amount (CP)	<i>144</i>
Admission requirements (in English)	<i>Medical Doctor's degree and qualification in primary speciality: paediatrician</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>paediatric allergist</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 3 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	<i>3</i>
Duration in month	<i>0</i>
Language	<i>latvian</i>
Amount (CP)	<i>144</i>
Admission requirements (in English)	<i>Medical Doctor's degree and qualification in primary speciality: paediatrician</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>paediatric endocrinologist</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 3 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	<i>3</i>
Duration in month	<i>0</i>
Language	<i>latvian</i>
Amount (CP)	<i>144</i>
Admission requirements (in English)	<i>Medical Doctor's degree and qualification in primary speciality: paediatrician</i>



Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>paediatric gastroenterologist</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 3 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	<i>3</i>
Duration in month	<i>0</i>
Language	<i>latvian</i>
Amount (CP)	<i>144</i>
Admission requirements (in English)	<i>Medical Doctor's degree and qualification in primary speciality: paediatrician</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>paediatric haematologist-oncologist</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 3 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	<i>3</i>
Duration in month	<i>0</i>
Language	<i>latvian</i>
Amount (CP)	<i>144</i>
Admission requirements (in English)	<i>Medical Doctor's degree and qualification in primary speciality: paediatrician</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>paediatric infectologist</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 3 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	<i>3</i>
Duration in month	<i>0</i>
Language	<i>latvian</i>
Amount (CP)	<i>144</i>

Admission requirements (in English)	<i>Medical Doctor's degree and qualification in primary speciality: paediatrician</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>paediatric cardiologist</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 5 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	5
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	240
Admission requirements (in English)	<i>Medical Doctor's degree</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>paediatric surgeon</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 3 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	3
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	144
Admission requirements (in English)	<i>Medical Doctor's degree and qualification in primary speciality: paediatrician</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>paediatric nephrologist</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 4 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	4
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	192

Admission requirements (in English)	<i>Medical Doctor's degree</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>paediatric neurologist</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 3 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	<i>3</i>
Duration in month	<i>0</i>
Language	<i>latvian</i>
Amount (CP)	<i>144</i>
Admission requirements (in English)	<i>Medical Doctor's degree and qualification in primary speciality: paediatrician</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>paediatric pneumonologist</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 4 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	<i>4</i>
Duration in month	<i>0</i>
Language	<i>latvian</i>
Amount (CP)	<i>192</i>
Admission requirements (in English)	<i>Medical Doctor's degree</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>paediatric psychiatrist</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 3 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	<i>3</i>
Duration in month	<i>0</i>
Language	<i>latvian</i>
Amount (CP)	<i>144</i>

Admission requirements (in English)	<i>Medical Doctor's degree and qualification in primary speciality: paediatrician</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>paediatric rheumatologist</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 3 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	3
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	144
Admission requirements (in English)	<i>Degree of a doctor of dental surgery</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>paediatric dentist</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 3 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	3
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	144
Admission requirements (in English)	<i>Medical Doctor's degree</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>dermatologist, venereologist</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 1 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	1
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	48

Admission requirements (in English)	<i>Medical Doctor's degree and qualification in any primary speciality</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>dietitian</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 1 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	<i>1</i>
Duration in month	<i>0</i>
Language	<i>latvian</i>
Amount (CP)	<i>48</i>
Admission requirements (in English)	<i>Medical Doctor's degree and qualification in any primary speciality, provided that the physician has worked in that primary specialty for at least five years</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>expert</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 3 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	<i>3</i>
Duration in month	<i>0</i>
Language	<i>latvian</i>
Amount (CP)	<i>144</i>
Admission requirements (in English)	<i>Degree of a doctor of dental surgery</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>endodontist</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 5 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	<i>5</i>
Duration in month	<i>0</i>

Language	<i>latvian</i>
Amount (CP)	240
Admission requirements (in English)	<i>Medical Doctor's degree</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>endocrinologist</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 4 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	4
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	192
Admission requirements (in English)	<i>Medical Doctor's degree</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>physical and rehabilitation medicine doctor</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 5 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	5
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	240
Admission requirements (in English)	<i>Medical Doctor's degree</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>gastroenterologist</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 5 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	5
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	240
Admission requirements (in English)	<i>Medical Doctor's degree</i>

Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>geriatrician</i>

### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

### Full time studies - 5 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	5
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	240
Admission requirements (in English)	<i>Medical Doctor's degree</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>gynaecologist, obstetrician</i>

### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

### Full time studies - 3 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	3
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	144
Admission requirements (in English)	<i>Medical Doctor's degree</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>family doctor (general practitioner)</i>

### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

### Full time studies - 5 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	5
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	240
Admission requirements (in English)	<i>Medical Doctor's degree</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>haematologist</i>

**Places of implementation**

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

**Full time studies - 1 years - latvian**

Study type and form	<i>Full time studies</i>
Duration in full years	<i>1</i>
Duration in month	<i>0</i>
Language	<i>latvian</i>
Amount (CP)	<i>48</i>
Admission requirements (in English)	<i>Medical Doctor's degree and qualification in primary specialty: internist or infectiologist, or paediatrician, or gastroenterologist</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	<i>-</i>
Qualification to be obtained (in english)	<i>hepatologist</i>

**Places of implementation**

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

**Full time studies - 4 years - latvian**

Study type and form	<i>Full time studies</i>
Duration in full years	<i>4</i>
Duration in month	<i>0</i>
Language	<i>latvian</i>
Amount (CP)	<i>192</i>
Admission requirements (in English)	<i>Medical Doctor's degree and qualification in any primary speciality</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	<i>-</i>
Qualification to be obtained (in english)	<i>immunologist</i>

**Places of implementation**

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

**Full time studies - 5 years - latvian**

Study type and form	<i>Full time studies</i>
Duration in full years	<i>5</i>
Duration in month	<i>0</i>
Language	<i>latvian</i>
Amount (CP)	<i>240</i>
Admission requirements (in English)	<i>Medical Doctor's degree</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	<i>-</i>
Qualification to be obtained (in english)	<i>infectologist</i>



**Places of implementation**

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

**Full time studies - 5 years - latvian**

Study type and form	<i>Full time studies</i>
Duration in full years	5
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	240
Admission requirements (in English)	<i>Medical Doctor's degree</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>internist</i>

**Places of implementation**

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

**Full time studies - 5 years - latvian**

Study type and form	<i>Full time studies</i>
Duration in full years	5
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	240
Admission requirements (in English)	<i>Medical Doctor's degree</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>cardiologist</i>

**Places of implementation**

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

**Full time studies - 5 years - latvian**

Study type and form	<i>Full time studies</i>
Duration in full years	5
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	240
Admission requirements (in English)	<i>Medical Doctor's degree</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>surgeon</i>

**Places of implementation**

Place name	City	Address
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Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007
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#### Full time studies - 4 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	4
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	192
Admission requirements (in English)	<i>Medical Doctor's degree</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>laboratory doctor</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 5 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	5
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	240
Admission requirements (in English)	<i>Medical Doctor's degree</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>medical geneticist</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 4 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	4
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	192
Admission requirements (in English)	<i>Medical Doctor's degree and degree of a doctor of dental surgery</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>oral and maxillofacial surgeon</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 4 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	4
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	192
Admission requirements (in English)	<i>Medical Doctor's degree</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>narcologist</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 5 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	5
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	240
Admission requirements (in English)	<i>Medical Doctor's degree</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>emergency medicine doctor</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 5 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	5
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	240
Admission requirements (in English)	<i>Medical Doctor's degree</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>nephrologist</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 6 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	6
Duration in month	0
Language	<i>latvian</i>

Amount (CP)	288
Admission requirements (in English)	<i>Medical Doctor's degree</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>neurosurgeon</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 4 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	4
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	192
Admission requirements (in English)	<i>Medical Doctor's degree</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>neurologist</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 2 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	2
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	96
Admission requirements (in English)	<i>Medical Doctor's degree and qualification in primary speciality: paediatrician</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>neonatologist</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 4 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	4
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	192
Admission requirements (in English)	<i>Medical Doctor's degree</i>

Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>ophthalmologist</i>

### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

### Full time studies - 5 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	5
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	240
Admission requirements (in English)	<i>Medical Doctor's degree</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>oncologist chemotherapist</i>

### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

### Full time studies - 2 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	2
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	96
Admission requirements (in English)	<i>Medical Doctor's degree and qualification in primary speciality: gynaecologist, obstetrician</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>gynaecologist in oncology</i>

### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

### Full time studies - 3 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	3
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	144
Admission requirements (in English)	<i>Degree of a doctor of dental surgery</i>

Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>orthodontist</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 4 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	<i>4</i>
Duration in month	<i>0</i>
Language	<i>latvian</i>
Amount (CP)	<i>192</i>
Admission requirements (in English)	<i>Medical Doctor's degree</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>otolaryngologist</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 1 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	<i>1</i>
Duration in month	<i>0</i>
Language	<i>latvian</i>
Amount (CP)	<i>48</i>
Admission requirements (in English)	<i>Medical Doctor's degree and qualification in the primary speciality: internist or family doctor (general practitioner), or therapeutic oncologist, or physical and rehabilitation medicine doctor, or geriatrician, or paediatrician</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>palliative care specialist</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 4 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	<i>4</i>
Duration in month	<i>0</i>
Language	<i>latvian</i>
Amount (CP)	<i>192</i>
Admission requirements (in English)	<i>Medical Doctor's degree</i>

Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>pathologist</i>

### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

### Full time studies - 4 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	<i>4</i>
Duration in month	<i>0</i>
Language	<i>latvian</i>
Amount (CP)	<i>192</i>
Admission requirements (in English)	<i>Medical Doctor's degree</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>paediatrician</i>

### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

### Full time studies - 3 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	<i>3</i>
Duration in month	<i>0</i>
Language	<i>latvian</i>
Amount (CP)	<i>144</i>
Admission requirements (in English)	<i>Degree of a doctor of dental surgery</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>periodontist</i>

### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

### Full time studies - 5 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	<i>5</i>
Duration in month	<i>0</i>
Language	<i>latvian</i>
Amount (CP)	<i>240</i>
Admission requirements (in English)	<i>Medical Doctor's degree</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>plastic surgeon</i>

**Places of implementation**

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

**Full time studies - 5 years - latvian**

Study type and form	<i>Full time studies</i>
Duration in full years	5
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	240
Admission requirements (in English)	<i>Medical Doctor's degree</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>pneumonologist</i>

**Places of implementation**

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

**Full time studies - 4 years - latvian**

Study type and form	<i>Full time studies</i>
Duration in full years	4
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	192
Admission requirements (in English)	<i>Medical Doctor's degree</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>psychiatrist</i>

**Places of implementation**

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

**Full time studies - 4 years - latvian**

Study type and form	<i>Full time studies</i>
Duration in full years	4
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	192
Admission requirements (in English)	<i>Medical Doctor's degree</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>psychotherapist</i>

**Places of implementation**

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007



**Full time studies - 5 years - latvian**

Study type and form	<i>Full time studies</i>
Duration in full years	5
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	240
Admission requirements (in English)	<i>Medical Doctor's degree</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>radiologist</i>

**Places of implementation**

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

**Full time studies - 5 years - latvian**

Study type and form	<i>Full time studies</i>
Duration in full years	5
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	240
Admission requirements (in English)	<i>Medical Doctor's degree</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>rheumatologist</i>

**Places of implementation**

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

**Full time studies - 4 years - latvian**

Study type and form	<i>Full time studies</i>
Duration in full years	4
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	192
Admission requirements (in English)	<i>Medical Doctor's degree</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>public health doctor</i>

**Places of implementation**

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

**Full time studies - 5 years - latvian**

Study type and form	<i>Full time studies</i>
Duration in full years	5
Duration in month	0

Language	<i>latvian</i>
Amount (CP)	240
Admission requirements (in English)	<i>Medical Doctor's degree</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>cardiac surgeon</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 4 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	4
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	192
Admission requirements (in English)	<i>Medical Doctor's degree</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>sport medicine doctor</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 4 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	4
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	192
Admission requirements (in English)	<i>Medical Doctor's degree</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>forensic medical expert</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 2 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	2
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	96

Admission requirements (in English)	<i>Medical Doctor's degree and qualification in primary speciality: psychiatrist</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>forensic psychiatric expert</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 5 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	5
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	240
Admission requirements (in English)	<i>Medical Doctor's degree</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>thoracic surgeon</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 1 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	1
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	48
Admission requirements (in English)	<i>Medical Doctor's degree and qualification in any primary speciality</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>transfusiologist</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 3 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	3
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	144

Admission requirements (in English)	<i>Medical Doctor's degree un qualification in primary speciality: surgeon or cardiac surgeon, or thoracic surgeon, or paediatric surgeon or urologist</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>transplantologist</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 5 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	<i>5</i>
Duration in month	<i>0</i>
Language	<i>latvian</i>
Amount (CP)	<i>240</i>
Admission requirements (in English)	<i>Medical Doctor's degree</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>orthopaedic traumatologist</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 5 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	<i>5</i>
Duration in month	<i>0</i>
Language	<i>latvian</i>
Amount (CP)	<i>240</i>
Admission requirements (in English)	<i>Medical Doctor's degree</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>urologist</i>

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 3 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	<i>3</i>
Duration in month	<i>0</i>
Language	<i>latvian</i>
Amount (CP)	<i>144</i>

Admission requirements (in English)	<i>Degree of a doctor of dental surgery</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>dental prosthetist</i>

#### **Places of implementation**

<b>Place name</b>	<b>City</b>	<b>Address</b>
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

### 3.1. Indicators Describing the Study Programme

**3.1.1. Description and analysis of changes in the parameters of the study programme made since the issuance of the previous accreditation form of the study field or issuance of the study programme license, if the study programme is not included on the accreditation form of the study field, including changes planned within the evaluation procedure of the study field evaluation procedure.**

Description and analysis of changes in the study programme parameters that have been made since the issuance of the previous accreditation sheet of the study direction or the issuance of the study programme licence, if the study programme is not included in the accreditation sheet of the study direction, including of changes planned within the assessment procedure of the study direction.

*Table 1. Changes in Parameters of the Study Programme (StP)*

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period (until 2022)	Planned changes within the assessment procedure (after the accreditation)
1.	Study direction	—	—
2.	Title of the StP	—	—
3.	Code according to the Latvian Education Classification	—	—
4.	Head of the StP	—	—
5.	Scientific degree of the head of the StP	—	—
6.	Objective of the StP	—	Basically, the aim of the study programme has not changed, it has been updated, taking into account the need to emphasise progress towards professional competitiveness of students in the international aspect
7.	Tasks of the StP	—	—

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period (until 2022)	Planned changes within the assessment procedure (after the accreditation)
8.	Learning outcomes to be achieved	—	Learning outcomes have been updated emphasising the aspects significant for mastering specialised physician's profession, understanding of the healthcare system, the area of research and continuing education, business and innovation, as well as independent improvement of competences in further professional activity
9.	Final examination upon the completion of the StP	—	—
10.	Type and form of studies	—	—
11.	Duration of implementation	—	—
12.	Language of implementation	—	—
13.	Workload of the StP (CP)	—	During reaccreditation it is planned to approve the change in total credit points (from 44 CP to 48/72 CP/ECTS per year). The changes are planned taking into account the amendments to the regulatory enactment (Law on Higher Education Institutions), as well as adapting more accurately the number of credit points for medical resident's load within studies and ensuring uniform understanding of the amount of residency studies in a month and in a year
14.	Admission requirements	—	—

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period (until 2022)	Planned changes within the assessment procedure (after the accreditation)
15.	Degree to be awarded	—	—



No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period (until 2022)	Planned changes within the assessment procedure (after the accreditation)
16.	Qualification to be awarded	<p>The following qualifications have been added to change procedures:</p> <ol style="list-style-type: none"> <li>Qualifications in the additional specialty of medical doctor: neurophysiologist; Qualification in the main specialty of medical doctor: acupuncturist; Qualification in the additional specialty of medical doctor: homeopath (AIKA SKK 27.05.2020, Decision No 2020/26-I)</li> <li>Qualification in the sub-specialty of medical doctor: Interventional radiologist; Qualification in the main specialty of medical doctor: clinical microbiologist; Qualification in the sub-specialty of medical doctor: spine surgeon (AIKA SKK 19.08.2020, Decision No 2020/32-I);</li> <li>Qualification in the additional specialty of medical doctor: sex therapist, sexual pathology doctor (AIKA SKK 17.03.2023, Decision No 2021/Test</li> <li>Qualifications in the additional specialty of medical doctor: andrologist (AIKA SKK 29.09.2021, Decision No 2021/14-I);</li> </ol>	<p>The additional specialty programme "Homeopath" is not submitted for accreditation, as it can be developed as a continuing education programme when the regulatory framework is in place. There are 4 graduates in the additional specialty programme, the fifth (last) graduate will be in summer 2023.</p>

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period (until 2022)	Planned changes within the assessment procedure (after the accreditation)
17.	Place of implementation	—	—

Table 1 clearly shows that there have been no significant changes in the content of the StP since the previous accreditation. Some clarifications have been made to ensure that the stated aim and learning outcomes of the study programme are clearly and comprehensibly articulated and to define improvements to the StP. As part of the re-accreditation, it is planned to approve the change of the total number of credit points of the programme from 44 Latvian credit points (hereinafter referred to as "CP") to 48 CP or 72 points according to the European Credit Transfer and Accumulation System (hereinafter referred to as "ECTS") per year, without changing the actual duration of studies. Since this change has been implemented in the light of amendments to the regulatory framework (the Law on Higher Education Institutions and the Cabinet Regulations issued in accordance with it), as well as by adjusting the number of credit points more precisely to the actual workload of the resident during the study period and ensuring an unambiguous understanding of the scope of residency studies on a monthly and annual basis, it should be emphasised that the actual workload of the resident during the study period remains unchanged.

**3.1.2. Analysis and assessment of the study programme compliance with the study field. Analysis of the interrelation between the code of the study programme, the degree, professional qualification/professional qualification requirements or the degree and professional qualification to be acquired, the aims, objectives, learning outcomes, and the admission requirements. Description of the duration and scope of the implementation of the study programme (including different options of the study programme implementation) and evaluation of its usefulness.**

**Title of the programme:** second level professional higher education programme "Residency in Medicine".

**Code:** 50721.

**Degree to be awarded and professional qualification:** qualification in a specific principal specialty, sub-specialty or additional specialty of a physician, which corresponds to the fifth level of professional qualification.

**Duration of implementation of the study programme:** 1–6 years depending on the duration of implementation of the specialty, which is defined in 24.03.2009 Regulations of the Cabinet of Ministers No. 268 "Regulations on the Therapeutic Expertise of Medical Personnel and Students Acquiring the First- Or Second-Level Professional Higher Medical Education and the Extent of Their Theoretical and Practical Knowledge".

**Amount of implementation of the study programme:** 48/72–288/432 CP/ECTS depending on the duration of implementation of the specialty in years. It is intended that one year of studies is 48/72 CP/ECTS, taking into account that residents implement their study work for 11 months per

year.

**Admission requirements:** the applicant needs second level professional higher education in medicine, degree of a physician or dentist (applying for the principal specialty or sub-specialty in dentistry) or physician's degree and a specialist's qualification in the principal specialty (applying for sub-specialty or additional specialty of a physician).

**Mutual linkage and compliance of elements characterising the programme:** the aim of implementation of the study direction "Health Care" is to ensure all levels of up-to-date health care education necessary for the Latvian state and in the international environment. The study programme is an integral part of the study direction and fully integrates in the study direction, ensuring achievement of the aim defined for it, because it is a continuation of the previous level studies and ensures the preparation of certified specialists for work in the health care system. Namely, the study programme is a successive follow-up to the second level higher professional education programme "Medicine" or the second level higher professional education programme "Dentistry", in which students obtain a physician's or dentist's degree. After obtaining a physician's or dentist's degree, students commence studies in one of the specialties of the residency study programme, acquiring the knowledge, skills and competences necessary for certification and independent professional activity in the specialty.

The title, degree to be obtained and professional qualification of the study programme is mutually relevant and fully conform to the purpose, tasks and results of the study programme, because physicians are prepared in the study programme for professional work in specialty and the health care system.

The aims, tasks and outcomes of the study programme, as well as of each specialty programme, are in close synthesis with each other. The formulated aim and tasks of the study programme define the aim, tasks and achievable results of each specialty. The defined learning outcomes follow from the aim and learning outcomes of study courses of each specialty, while they are closely related to the total aim and learning outcomes of the programme.

To achieve the aim of the study programme to the fullest extent possible and to implement the learning outcome, specific conditions for admission have already been incorporated into the admission regulations since 2018.

An entry competition for studies in residency include:

- assessment of results regarding progress in undergraduate studies (applying for a principal specialty) or receipt of a letter of recommendation from an employer or an industry professional (applying for a sub-specialty or additional specialty);
- assessment of results of the previously implemented scientific activity;
- an interview with the applicant by a specialty interview commission specifically set up for that purpose. The interview assesses the motivation of the applicant to study in specialty, professional fitness and professional communication skills (for team work, communication with patient and relatives).

This allows the selection for studies in the specific specialty motivated residents with a strong academic knowledge base, knowledge and understanding of research processes in medicine.

***Evaluation of the effectiveness of the duration and scope of the study programme (including for different variants of the study programme)***

The evaluation of the effectiveness of the study programme "Residency in Medicine" is a process used to monitor and evaluate the achievement of the aims defined in the study programme in terms of knowledge, skills and competences.

The evaluation of the effectiveness has the following scope: the duration of the implementation of the study programme, the scope of knowledge, skills and competences complies with internal and external laws and regulations. (Directive, Cabinet Regulations No 268, Medical Treatment Law; Cabinet Regulations No 322 of 13 June 2017 “Regulations on the Classification of Latvian Education”).

The aim, objectives and learning outcomes of the study programme are derived from the relevant occupational standard, the abovementioned legislation and comply with the LQF/EQF requirements for level 8. Compliance was re-evaluated and clarified after the entry into force of the new occupational standard, their relationship, including with admission requirements, is appropriate.

The evaluation of the effectiveness in the study programme “Residency in Medicine” includes the assessment of knowledge and skills, which is done by examining the theoretical knowledge, skills and competences of residents in the relevant specialty, as well as interdisciplinary skills, including communication, cooperation skills, ethical aspects, patient safety issues, digital skills, research skills, teaching skills, presentation skills, public speech and business skills. Knowledge and skills with a separate assessment are evaluated in each study course. In addition, the manipulations mastered are evaluated. Continuous professional development is an integral part of the programme.

The evaluation of effectiveness is carried out both on a continuously and periodically in order to ensure the achievement of study goals and, where necessary, providing the opportunity for supportive corrective action. Assessment is done by: Heads of residency specialty programmes in the relevant specialty; doctors under whose supervision or direction residents work and study; doctors conducting theoretical training; university teaching staff who provide theoretical education, simulations and the acquisition of interdisciplinary knowledge, skills and competences. This assessment is essential in order to ensure the preparation of highly qualified specialists for the national economy of Latvia.

Enclosed:

Annex 24.1. Model diploma and supplement thereto.

Annex 24.8. Sample study contract.

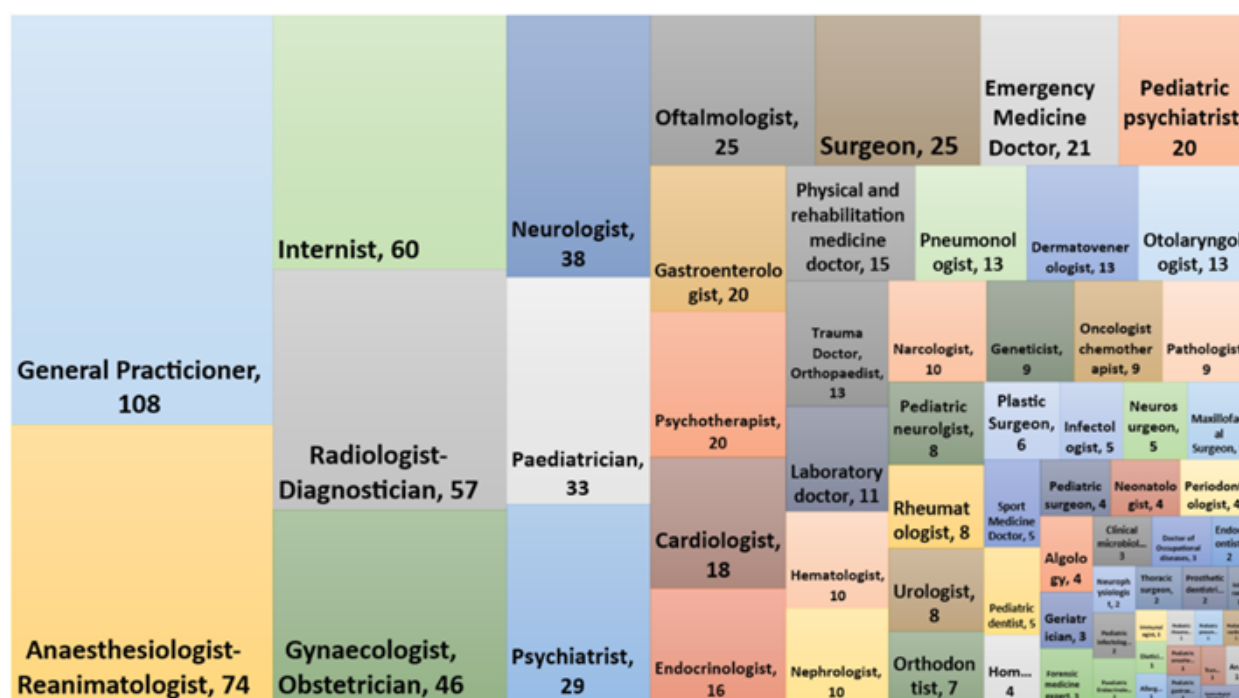
### **3.1.3. Economic and/ or social substantiation of the study programme, analysis of graduates' employment.**

**Economic and social rationale.** A qualitatively functioning health system is one of the cornerstones of the overall national development, including economic and social. Thus, the preparation of qualified certified specialist physicians implemented in the study programme is with significant economic and social return and conforms to both the aim and outcomes specified in the National Development Plan of Latvia for 2021-2027 and the Public Health Guidelines of the Ministry of Health for 2017-2027.

RSU implements residency training according to the number of residency places defined by the state – Ministry of Health – by specialty (state budget studies), as well as according to the needs of employers – medical treatment institutions (state budget and tuition fee studies). Resident studies are provided in 77 specialties: 46 principal specialties (studies should be carried out immediately after graduation of undergraduate medical studies), 18 sub-specialties and 13 additional specialties (studies after graduation from principal specialty). An illustrative breakdown of residents by

specialty and the number in each of them (in academic year 2022/2023) is shown in Figure 1.

Figure 1. Breakdown of residents by specialties in academic year 2022/2023



Taking into account the problematic situation in Latvia with the long-term shortage of medical treatment personnel in regions (outside Riga), the Faculty of Residency (hereinafter referred to as FR) in the process organisation pays particular attention to the implementation of activities that promote attracting prospective residents and residents to work in regional medical treatment institutions both during residence and after residency. For students of 4<sup>th</sup> and 5<sup>th</sup> years of studies of undergraduate medical studies (before residency), information days of different regional medical treatment institutions are organised, in which students interested in working in the relevant medical treatment institution have the opportunity to meet with heads of medical treatment institutions to discuss possibilities for mutual cooperation. Information days are organised annually and, for example, in academic year 2021/2022, FR organised such meetings with eight different regional medical treatment institutions. Representatives of regional medical treatment institutions also have the opportunity to address residents at various events organised by RF.

These activities have contributed to the attraction of specialists to the regions. In academic year 2015/2016, the FR was studied by four residents (~0.5% of the total number) who had an agreement with the regional medical treatment institution regarding the continuation of employment relations in the specialty after the completion of the residency studies. In the academic year 2022/2023, 175 such residents study FR (~20% of the total). For more detailed information on the medical treatment institutions with which RSU has cooperation agreements on the provision of resident training and the number of residents in an employment relationship with each of them (in academic year 2022/2023), see Figure 2.

Figure 2. Network of medical treatment institutions – cooperation partners – in the training of residents and the number of residents thereof (in academic year 2022/2023)



institution for further evaluation of the situation, as well as the results of the assessment of residents are reported annually to medical treatment institutions;

- the representation of students in decision-making related to the study process and improvement of the residency is also ensured by three representatives of residents in the FR Council and a representative of the Student Union in the single admission commission (for admission to studies).

**Employers'** opinions on the implementation of the study process are obtained in the following ways:

- to obtain feedback on the resident training process, the FR conducts annual individual meetings with management representatives of treatment (especially regional) institutions, who are employers of residents. During the meeting, the general principles of cooperation and the opinion of the medical treatment institution regarding the process managed by the FR are discussed, as well as the study process of each resident, the needs of the medical treatment institution for training and employment of the resident are individually evaluated. Adjustments to the resident training process are planned, if necessary;
- to obtain feedback on the quality of FR's work in resident training, FR organises an annual anonymous employer questionnaire. The results of the survey are analysed at the FR Council meeting, if necessary deciding on improvement measures;
- representatives of employers are involved in all stages of residency studies, including in residency selection interview commissions, the implementation of practical training and the composition of the national examination board for residency (in accordance with the regulation, the chairperson of the commission is a representative of the medical treatment institution). The residency selection process is evaluated annually, also asking for the opinions of participants in interview commissions;
- to identify various problems related to residency studies, the FR also implements activities of a larger scale, highlighting problems that are not within the competence of the higher education institution. For example, on 14 March 2022, the FR organised a round table discussion on problems in the implementation of the residency study process in the country. It was attended by 65 participants from 34 different health care institutions and the FR Dean, a representative of the Latvian Junior Doctors Association, a representative of a clinical university hospitals, a representative of a regional medical treatment institution, a representative of a private medical treatment institution and a representative of the Ministry of Health provided an opinion for discussion. The Ministry of Health has been informed of the issues identified during the discussion with a request to evaluate solutions at national level;
- the representation of employers in decision-making related to the study process and improvement of the residency is also ensured by three representatives of residents in the FR Council.

**Graduates'** opinions on the implementation of the study process are obtained by organising an annual survey of graduates. Survey questions are coordinated in the FR Council and cover topics like strengths and weaknesses of the programme, recommendations for improving the programme, an opinion about the overall quality of training implemented by RSU and the medical treatment institution in general. The results of the surveys are analysed at the FR Council meeting, if necessary deciding on the matter of improvement measures. It should also be taken into account that residency graduates often become employers or representatives of training personnel and get involved in the improvement of the study programme using other representation mechanisms (for example, the graduate of academic year 2018/2019 dr. Mihails Dolguševs is the head of the RSU clinical base unit of Liepāja Regional Hospital, the graduate of academic year 2016/2017 dr. Inese Briede is the head of the specialty programme "Pathologists", the graduate of academic year

2020/2021 Inese Driķe is the healthcare manager of Rezekne Hospital, etc.).

Enclosed:

Annex 10. Employment of graduates.

Survey results of residents in academic year 2017./2018. - 2021./2022.

Survey results of graduates of academic year 2019./2020. - 2021./2022

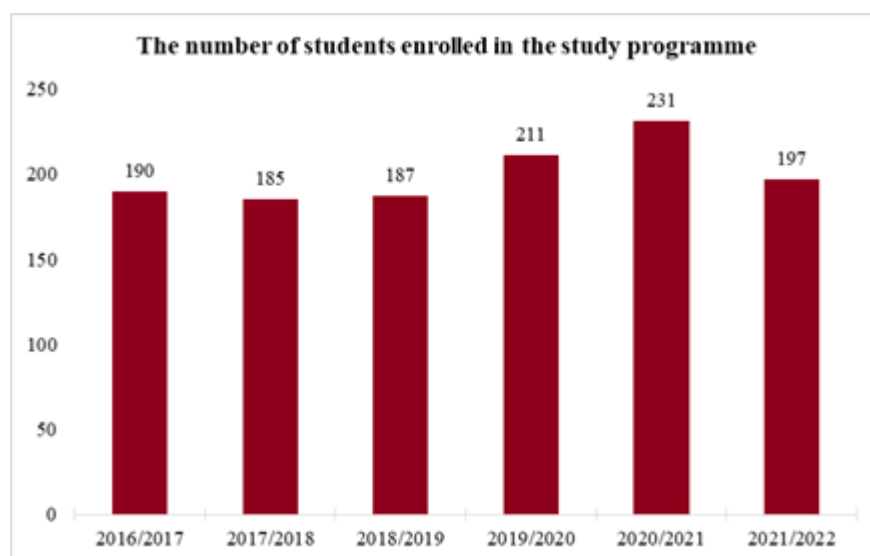
**3.1.4. Statistical data on the students of the respective study programme, the dynamics of the number of the students, and the factors affecting the changes to the number of the students. The analysis shall be broken down into different study forms, types, and languages.**

In the dynamics of the number of students **admitted** to StP, there has been a positive increase since the last stage of reaccreditation the number of students has increased by a total of 18% since academic year 2016/2017. It should be noted that the number of students admitted depends significantly on the decision of the Ministry of Health regarding the state-funded study places in a particular academic year. That number has risen slightly in recent years.

The management of the study programme is working both on the promotion of StP and on the provision of a targeted platform for mutual meetings between prospective residents and employers – medical treatment institutions. Thus, for example, in academic year 2021/2022, three information days for students of undergraduate medical studies regarding residency studies, nine meetings of students and representatives of medical treatment institutions, four informative seminars regarding studies in a specific RSU specialty have been organised. In academic year 2020/2021, interview cycles with residents on the topic “[Residency. My success story](#)” were prepared (in English – [here](#)).

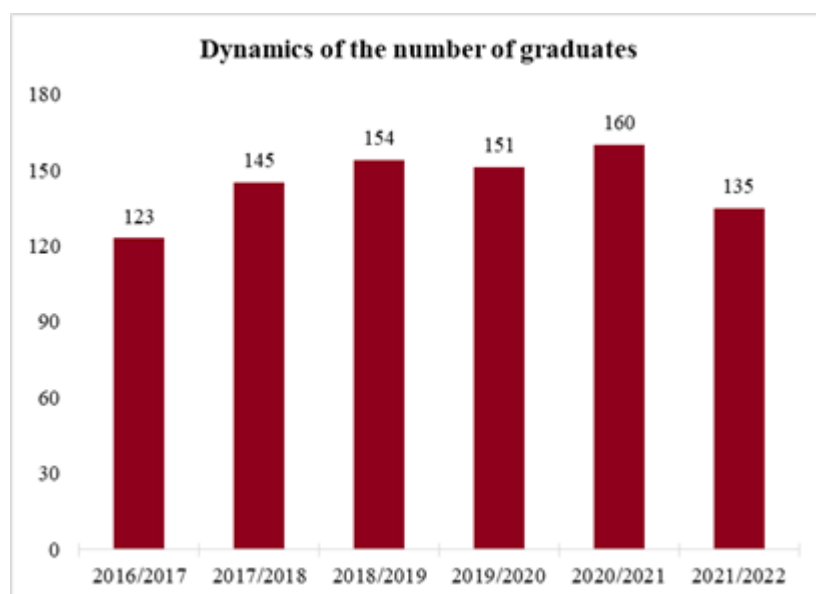
When assessing the number of graduates, it must be concluded that the dynamics are stable. Every year, ~ 140-160 residents graduate from residency and start full work in the healthcare system (see Figures 3 and 4).

*Figure 3. Number of students enrolled to the second level professional study programme “Residency in Medicine”*



*Figure 4. The dynamics of the number of graduates in the second level professional study*





Student **drop-out** data show that in recent academic years, 3-4% of the total number of residents on average from are expelled without degrees and qualification. If we look at more details, it should be noted that part of students (53-82% depending on the year of studies) are expelled because they withdraw from studies and only rarely they do this due to academic failures or non-attendance (1-2 cases per year). Here, with regard to exclusion due to withdrawal, it should be noted that, most often, that does not mean abandonment of studies in general, but involve processes specific to the place of residency, that is to say, the possibility of being admitted to state-funded residency or to another related specialty. Access to state-funded studies from tuition fee studies or a change of specialty in residency is very limited. It is possible to access state-funded studies from tuition fee studies or to change the specialty only in cases if the resident participates again in the admission process in the next years. If admission to another specialty or state-funded studies was successful, it means withdrawal from studies in the previous tuition fee place or previous specialty. According to FR, in the last three academic years, 93%, or 37 residents, who withdrew from studies, did not actually leave their studies, but continued them for state funds or in another related residency specialty.

To promote improvement of the practical and theoretical competence of residents, exchange of knowledge regarding the organisation of the medical treatment process, FR residents use **study mobility possibilities**. It can be implemented in two ways during studies – by going to Erasmus+ mobility or by registering for traineeship abroad (if the resident wishes to travel to a country outside the Erasmus+ mobility area). In the study direction “Health Care” cooperation agreements for the exchange of students and staff with 45 universities in different European countries (Austria, Belgium, Czechia, Denmark, France, Estonia, Lithuania, Poland, Slovenia, Spain, Germany, etc.) have been concluded until the end of 2027. Students may go for exchange of experience to countries, with which no cooperation agreements have been concluded, as well as to all partner higher education institutions of the study direction “Health Care”.

The analysis of the mobility of residents through Erasmus or traineeships abroad shows that it has been used by 16-31 residents in recent academic years, indicatively 3-4% of the total number of active residents. Starting from academic year 2019/2020, there has been a drop in the number of residents considering the COVID-19 pandemic and its restrictions.

Over the last three academic years, residents most often went to Erasmus+/traineeship mobility to leading Austrian, British and German clinics (see Table 2).

Table 2. Study mobility opportunities used by residents of the professional higher education programme “Residency in Medicine” across academic years

Type of traineeship	Academic year						
	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Erasmus	20	19	28	27	12	17	14
Traineeship	1	6	5	7	6	1	6
Total	21	25	33	34	18	18	20

Enclosed:

Annex 16. Statistical Data on Students.

**3.1.5. Substantiation of the development of the joint study programme and description and evaluation of the choice of partner universities, including information on the development and implementation of the joint study programme (if applicable).**

## 3.2. The Content of Studies and Implementation Thereof

**3.2.1. Analysis of the content of the study programme. Assessment of the interrelation between the information included in the study courses/ modules, the intended learning outcomes, the set aims and other indicators with the aims of the study course/ module and the aims and intended outcomes of the study programme. Assessment of the relevance of the content of the study courses/ modules and compliance with the needs of the relevant industry, labour market and with the trends in science on how and whether the content of the study courses/ modules is updated in line with the development trends of the relevant industry, labour market, and science.**

StP is full-time intramural studies, providing for a resident’s study work in the amount of the full-time equivalent. The annual amount of the programme is 48/72 CP/ECTS (the total amount for acquisition of a resident specialty is from 48/72 CP/ECTS to 288/432 CP/ECTS depending on the duration of studies in the specialty. The amount of studies in credit points per year is planned taking into account that:

- one year of studies of a resident is 12 months, 11 months of which is study work, while 1 month – annual leave;
- one study week of a resident corresponds to 1/1,5 CP/ECTS. For study courses with an odd number of weeks, the number of CP/ECTS in full numbers is determined taking into account the importance of the study course in the acquisition of the specialty program.

StP consists of 77 different specialties. To ensure fulfilment of the aims and tasks of the StP, as well as achievement of learning outcomes, the programme of each specialty is structured in specialty study courses, which include both practical and theoretical training (including simulation-based), manipulation and duty shifts, as well as several study courses, which intertwine all specialties – “Pedagogical Work” (2/3 CP/ECTS per year of studies, scheduled annually), “Theoretical Education Provided by RSU” (2/3 CP/ECTS per year of studies, scheduled annually), “Scientific Research Paper” and “National Degree Examination in Residency” (a total of 10/15 CP/ECTS, scheduled for the penultimate and final year of studies). Since StP is made of specialties with variable duration of implementation of the variants (1-6 years), the distribution of practical and theoretical training as well as research work may vary according to the number of years of studies in the specialty. The third table shows the organisation of studies, the principles of which are the same for all specialties across one year – depending on whether the year of studies includes scientific research paper (the penultimate year of studies) or scientific research work and the national degree examination in residency (the last year of studies).

Table 3. Organisation of studies in the second level professional higher education programme “Residency in Medicine”

Part of the study process	Time intended for studies in weeks (academic hours)			CP/ECTS		
	Y*	PUY*	FY*	Y*	PUY*	FY*
Practical training (93% / 85% / 80%)						
• Placement, including manipulation, simulation education and duty shifts	44 (2280 ac. h)	40 (2067 ac. h)	38 (1960 ac. h)	44/66	40/60	38/57
• pedagogical work	2 (107 ac. h)	2 (107 ac. h)	2 (107 ac. h)	2/3	2/3	2/3
Theoretical training (7% / 7% / 7%)						
• seminars	33 seminars every year (66 ac. h)			n. a.*	n. a.*	n. a.*
• Theoretical education provided by RSU	2 (107 ac. h)	2 (107 ac. h)	2 (107 ac. h)	2/3	2/3	2/3
Scientific research work and national degree examination (0% / 8% / 13%)						

Research paper and national degree examination in residency	n. a.	4 (213 ac. h)	6 (320 ac. h)	n. a.	4/6	6/9
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*Y – in one year of studies, where no research paper and no national degree examination in residency is provided; PUY – penultimate year of studies; FY – final year of studies*

*\* Theoretical training – seminars do not have separate credit points, they are a component of practical training in a medical treatment institution.*

*\*\*n.a. – not applicable*

The content of studies in each specialty is designed in such a way as to gradually develop the knowledge, skills and competences of residents and prepare them for independent work in the specialty as a certified specialist, conform to the aims set for StP and specialty, ensure achievement of tasks and learning outcomes of StP.

The study content is designed and ensures compliance with the needs of the sector and current scientific trends.

- Compliance with the regulatory framework in sector education. StP has been designed in accordance with the laws and regulations of the Republic of Latvia – Medical Treatment Law, Law on Higher Education, binding regulations of the Cabinet of Ministers. In particular, it should be emphasised that the content of specialty programmes conforms to the requirements defined for each specialty in Regulations of the Cabinet of Ministers No. 268 issued on 24 March 2009 “Regulations on Therapeutic Expertise of Medical Personnel and Students Acquiring the First- or Second-Level Higher Professional Medical Education and the Extent of their Theoretical and Practical Knowledge” (see Annex 17.2).
- Consistency of the content of specialty studies with international trends. Content is regularly reviewed and harmonised with international standards, in particular the European Standards in Medical Training recommended by the European Union of Medical Specialists or recommendations in the specific specialty of the European Union of Professional Associations.
- A high level of competence in the development of specialty study content (including based on current scientific developments). The study content of each specialty is developed by the head of the specialty programme who is a high-level professional in the relevant sector, most often the head of the professional association of the specialty or a member of the board of the association and thus is involved in the supervision of the content of the management and continuing education of the specialty at national or international level. All heads of specialty programmes also work in research and are authors of international scientific publications, participate in industry congresses, international trainings, many are elected lecturers of RSU departments who also ensure the existence of appropriate pedagogical and study content development skills (more detailed description of heads of specialty programmes in section 3.4.1). Such composition of personnel facilitates the development and updating of study content in line with current industry needs and state-of-the-art scientific discoveries, both with regard to practical training and theoretical training – defining thematic seminars.
- Implementation of training in competence centres and with employers. The training of residents in each practical course takes place in full or in part in a medical treatment institution, which is the centre of excellence of the relevant profile, a university hospital clinic or a leading clinic in the sector. For example, plastic and microsurgery training for residents takes place at the Latvian Microsurgery Centre, in rheumatology – at the ORTO clinic, in sports medicine – at the Sports Laboratory, in cardiology – in P. Stradins Clinical University

Hospital, Latvian Cardiology Centre, etc. This ensures the acquisition of theoretical and practical knowledge, which corresponds to science-based and modern medical treatment trends and which residents can transfer to treatment processes in their workplaces (for example, regional medical treatment institutions).

- Integration of modern and patient-safe educational methods into mastering of StP. Simulation-based training in cardiopulmonary resuscitation and acute situations is mandatory on an annual basis for all specialty study courses. During the COVID-19 pandemic, the university organised simulation training in safe use of personal protective equipment. On the other hand, a number of specialties (anaesthesiologist, reanimatologist, paediatric surgeon, general practitioner, gynaecologist, obstetrician, invasive radiologist, surgeon, paediatrician, ophthalmologist, trauma doctor, orthopaedist and urologist) include a separate study course consisting of simulation training, playing out different simulation scenarios at the RSU Medical Education Technology Centre or performing manipulations and surgeries on living tissue in the Doctors Safe Train centre. Simulation education included in resident training ensures the acquisition of high-quality and patient-safe medical education meeting modern standards.
- Integration of sector-specific transversal skills and interdisciplinary medical and other industry-specific knowledge and skills into the StP. For a resident to acquire the knowledge, skills and competences necessary for a broad spectrum physician as a professional, the StP includes several study courses that contribute to it. During his/her studies, the resident annually carries out the pedagogical work included in the StP to develop the pedagogical skills necessary for the resident as a physician in communication with the patient and colleagues, transfer of knowledge to students, other professionals in the sector and society. The StP also includes theoretical education provided by RSU, which consists of various educational activities to increase the competence of a resident in interdisciplinary matters and develop current transversal skills – classes in information and searching for medical information in electronic resources (implemented by specialists of the RSU Library), lessons and theoretical training for improvement of management skills, theoretical training on aspects of management of the health care system, patient safety, liability of medical practitioners in the legal context and other various interdisciplinary sectoral issues. The content of this study course is developed annually taking into account current trends in the sector, as well as the principles laid down in planning documents of different levels, for example, in the Public Health Guidelines for 2021-2027, for increasing the competence of physicians within the framework of continuing education. Similarly, scientific research is an integral part of the StP to develop a resident's ability to think critically, analyse, apply in practice the latest scientific knowledge and various research methods.
- Regular feedback to improve the programme. Regular surveys of residents, graduates and employers allow monitoring of programme quality and compliance with industry trends. Similarly, in cooperation with medical treatment institutions, surveys of physicians teaching residents are also carried out during the training process. After the completion of each study course, the physician teaching residents, as an industry and field professional, completes an assessment questionnaire and provides feedback regarding the observed knowledge, skills and competences of the resident during the study courses, ensuring, if necessary, the possibility for the faculty and head of the programme to evaluate the content of the programme and improve it.

### ***Determination of the number of credit points and the duration of the study courses***

Section 1, Clause 19 of the Medical Treatment Law states that: "Residency - education in the official language of a doctor being in employment legal relations with a medical treatment institution implementing an education programme for the acquisition of a specialty in accordance with an

accredited professional residency education programme in medicine". The special status of the resident among other students is derived from this norm. In particular, the training of a resident is inseparable from work, and a resident is both a student and an employee who receives remuneration for his/her work during training. The position of a resident is also included in the Classification of Occupation[1]. The amount of remuneration in both residency places financed from the state budget and residency places financed from natural and legal persons' funds (fee-based places) is set out in the Cabinet Regulations No 685 of 30 August 2011 "Procedure for Admission, Allocation and Financing of Residency for Residents". As an additional factor, it should be taken into account that the work of residents also makes a significant contribution to the national economy, in particular to health care, with residents providing a significant share of state-funded health care services to the population. The planning, training and work of residents, in particular in residency places paid for by the state budget, is a process planned and paid for by the Ministry of Health and medical institutions in accordance with the above-mentioned Cabinet Regulations.

Article 21(1) of Directive 2005/36/EC of the European Parliament and of the Council of 7 September 2005 on the recognition of professional qualifications (text with EEA relevance) (hereinafter - the Directive) provides that: "1. Each Member State shall recognise evidence of formal qualifications as doctor giving access to the professional activities of doctor with basic training and specialised doctor, as nurse responsible for general care, as dental practitioner, as specialised dental practitioner, as veterinary surgeon, as pharmacist and as architect, listed in Annex V, points 5.1.1, 5.1.2, 5.2.2, 5.3.2, 5.3.3, 5.4.2, 5.6.2 and 5.7.1 respectively, which satisfy the minimum training conditions referred to in Articles 24, 25, 31, 34, 35, 38, 44 and 46 respectively, and shall, for the purposes of access to and pursuit of the professional activities, give such evidence the same effect on its territory as the evidence of formal qualifications which it itself issues. Such evidence of formal qualifications must be issued by the competent bodies in the Member States and accompanied, where appropriate, by the certificates listed in Annex V, points 5.1.1, 5.1.2, 5.2.2, 5.3.2, 5.3.3, 5.4.2, 5.6.2 and 5.7.1 respectively. Whereas, Article 25(3) states that "Training shall be given on a full-time basis at specific establishments which are recognised by the competent authorities. It shall entail participation in the full range of medical activities of the department where the training is given, including duty on call, in such a way that the trainee specialist devotes all his professional activity to his practical and theoretical training throughout the entire working week and throughout the year, in accordance with the procedures laid down by the competent authorities. Accordingly, these posts shall be the subject of appropriate remuneration".

Article 11 of the Law on Regulated Professions and Recognition of Professional Qualifications states that "General requirements for residential education programme which provides diploma of higher education or other equivalent evidence of qualifications are the following: 1) in order to be accepted for such training the applicant shall master respective study programmes mentioned in Article 10 of this Law; 2) the programme shall comprise theoretical and practical training in accordance with study programme and shall be acquired at a university, clinic or other medical institution which complies with the requirements referred to in part 3 Article 9 of this Law". Accordingly, the second paragraph of Article 13 of the Law states: "(2) General requirements for the education programme in specialised dentistry for the acquisition of a diploma of medical education or other evidence of acquired qualifications are the following: 1) in order to commence the education it is necessary to acquire the respective study programme referred to in Article 12 of this Law; 2) programme includes a full-time accredited theoretical and practical residential education." In the informative references to the Directives of the European Union, Paragraph 29 of this Law makes reference to the above-mentioned Directive[2]. Thus, in order to ensure the recognition in the European Union of a diploma issued in Latvia on the qualification of a medical doctor-specialist, in accordance with the Directive, the Medical Treatment Law and the Law on Regulated Professions and Recognition of Professional Qualifications, the study and working hours of the resident must

coincide and the training must take place on a full-time basis.

As stated in the Section 131, Part one of the Labour Law: "(1) Regular daily working time of an employee may not exceed eight hours, and regular weekly working time - 40 hours. Daily working time within the meaning of this Law shall mean working time within a 24-hour period." Whereas, Section 149 (1) of the Labour Law provides: "(1) Every employee has the right to annual paid leave. Such leave may not be less than four calendar weeks, not counting public holidays. Persons under 18 years of age shall be granted annual paid leave of one month." As there are 52 weeks in a year, the normal working time of employees, excluding annual leave, is 48 weeks a year, or 11 months. It follows from these provisions of the Labour Law and the body of legislation referred to above that the training of a resident must be 40 astronomical hours per week and 48 weeks or 11 months per year. Some residents are entitled to annual paid supplementary leave, for example, employees caring for less than three children under the age of 14, at least one working day (in accordance with Section 151(1) of the Labour Law). However, not all residents are entitled to this additional leave, and the number of days of additional leave due is relatively small. In addition, unlike other students, residents also study on Saturdays, Sundays and public holidays (on-call days), so the actual study time is not reduced at the expense of these days. Therefore, the possible granting of additional paid annual leave to some residents does not affect the overall duration of the residency studies, which is 48 weeks per year.

Section 1, Clause 10 of the previous Law on Higher Education Institutions, which was in force at the beginning of the current accreditation period, stipulated: "10) full-time studies - a type of study which corresponds to 40 credit points per academic year and not less than 40 academic hours per week". Section 1(8) of the present Law on Higher Education Institutions stipulates "Credit point - an accounting unit expressing the amount of study work based on the learning outcomes defined in a study programme or part thereof and the study load related to their achievement. 60 credit points correspond to the learning outcomes acquired during one academic year of full-time study in accordance with the European Credit Transfer and Accumulation System. Credit points are expressed as whole numbers. One credit point corresponds to 25-30 hours of study work". The study workload is normally 40 CP / 60 ECTS per 40 weeks or 10 months of the programme per year. Consequently, according to the provisions of the above-mentioned Law, one week of study work usually corresponds to 1 CP / 1.5 ECTS. As the duration of the residency study year is 48 weeks or 11 months, the study year of the residency corresponds to 48 CP / 72 ECTS of study work.

Section 1, Clause 10 of the previous Law on Higher Education Institutions, which was in force at the beginning of the current accreditation period, stipulated a minimum number of academic hours per week, i.e. not less than 40 academic hours per week. Section 1 (10) of the Law on Higher Education Institutions establishes a range according to which one credit point corresponds to up to 30 hours of academic work. Applying this ratio to residency studies, the amount of study work per 1 CP / 1.5 ECTS is up to 45 hours of study work per week.

In summary, the duration of the residency study year and consequently the amount of CP / ECTS has been adjusted taking into account the status of the resident as a student employee, as well as the amendments to the Law on Higher Education Institutions. That is, the 48 weeks or 11 months of study and working time have been compared to the 4 weeks of study leave or paid annual leave. The 48 weeks or 11 months of the residency study year correspond to a total study work of 48 CP / 72 ECTS. A week of residency study corresponds to 1 CP / 1.5 ECTS or up to 45 hours of study work.

There is no study leave planned during the academic year of the residency, as the training of residents is planned simultaneously for all residents, coordinated with the workload of the doctors in the medical institutions involved in the training and the necessary provision of healthcare

services in the country. In case a resident has an individual need for a break in studies, an academic leave is arranged for the required period, which may be weeks or a few months. In this case, the resident's period of study will be extended by the period of the academic leave, i.e. the award of the diploma may take place during any period of the calendar year.

As the main form of training for residents is practical training in a medical institution, the duration of the study course is also set in weeks and depends on the importance of the knowledge, skills and competences to be acquired in the relevant specialty. The duration of study in weeks is of significant importance for Rīga Stradiņš University when enrolling applicants in subsequent stages of studies in accordance with the Cabinet Regulations No 932 of 16 November 2004 "Procedure for the Initiation of Studies in Subsequent Study Stages", as well as in accordance with the Regulations on validating the learning outcomes and starting studies in subsequent study stages[3]. In the context of this type of admission, the time criterion is also relevant in cases when the Recognition and Validation Commission of Rīga Stradiņš University validates the applicant's previously acquired professional experience in accordance with the Cabinet Regulations No 505 of 14 August 2018 "Regulations on Recognition of Competences Developed Outside Formal Education or Gained in Professional Experience and Study Results Achieved in the Previous Education", as well as the Regulations on Recognition of Competences Acquired Outside Formal Education or Gained in Professional Experience and Learning Outcomes from Prior Education at Rīga Stradiņš University[4].

Theoretical and practical training of residents is organised in accordance with Rīga Stradiņš University Academic Regulations II - Regulations for Residency Studies[5]. During practical training at a medical institution, a resident performs professional activities under the direct supervision or guidance of a trained physician in accordance with Section 28 of the Medical Treatment Law and Paragraph 2 of the Cabinet Regulations No 268 of 24 March 2009 "Regulations Regarding Competence of Medical Practitioners and Students Studying First- or Second-level Professional Higher Medical Education Programmes in Medical Treatment and the Amount of Theoretical and Practical Knowledge of Such Persons" (hereinafter - the Cabinet Regulations No 268).

[1] Cabinet Regulations No 264 of 23 May 2017 "Regulations on the Classification of Occupations, Key Tasks and Basic Qualification Requirements Corresponding to the Classification", Annex "Classification of Occupations", column 160.4. "Resident (in the specialty of family doctor/general practitioner)", occupation code 2211 04, and column 162.94. "Resident (except residents in the specialty of family doctor/general practitioner), occupation code 2212 94.

[2] The Law was supplemented with a reference to the Directive by the amendment of 17 July 2008 to the Law on Regulated Professions and Recognition of Professional Qualifications" which entered into force on 13 August 2008.

[3] Regulations on validating the learning outcomes and starting studies in subsequent study stages (approved by decision of RSU Senate Presidium on 27 June 2022, Minutes No. 2-SP-1/12/2022, available: [https://www.rsu.lv/sites/default/files/imce/Dokumenti/noteikumi/noteikumi-par-studiju-rezultatu-ieskaitisanu-un-studiju-uzsaksanu-velakos-studiju-posmos\\_06.2022.pdf](https://www.rsu.lv/sites/default/files/imce/Dokumenti/noteikumi/noteikumi-par-studiju-rezultatu-ieskaitisanu-un-studiju-uzsaksanu-velakos-studiju-posmos_06.2022.pdf)).

[4] Regulations on Recognition of Competences Acquired Outside Formal Education and Learning Outcomes from Prior Education at Rīga Stradiņš University (approved at the meeting of RSU Senate on 22 November, Minutes No. 2-S-1/9/2022; available: [https://www.rsu.lv/sites/default/files/imce/Dokumenti/Nolikumi/nolikums\\_par\\_afiipp\\_rezultatu\\_atzisanu-2022.pdf](https://www.rsu.lv/sites/default/files/imce/Dokumenti/Nolikumi/nolikums_par_afiipp_rezultatu_atzisanu-2022.pdf)).

[5] Rīga Stradiņš University Academic Regulations II – Regulations for Residency Studies (approved



by the decision of Rīga Stradiņš University Senate on 21 June, Minutes No 2-1/7/2021; available: [https://www.rsu.lv/sites/default/files/imce/Dokumenti/studijas/rsu\\_rezidenturas\\_studiju\\_reglaments\\_2021\\_2022.pdf](https://www.rsu.lv/sites/default/files/imce/Dokumenti/studijas/rsu_rezidenturas_studiju_reglaments_2021_2022.pdf)).

Enclosed:

Annex 17.1. Compliance of the Study Programme With the National Educational Standard.

Annex 17.2. Compliance of the study programme with the industry-specific regulations.

Annex 18.1. Mapping of the Study Courses for the Achievement of Learning Outcomes of the Study Programme.

Annex 18.2. Compliance of the Qualification to Be Acquired Upon Completion of the Study Programme With the Professional Standard.

Annex 19. Planning of the Study Programme (For Each Type and Form of the Implementation of the Study Programme).

Annex 20. Description of Study Courses.

**3.2.2. In the case of master's and doctoral study programmes, specify and provide the justification as to whether the degrees are awarded in view of the developments and findings in the field of science or artistic creation. In the case of a doctoral study programme, provide a description of the main research roadmaps and the impact of the study programme on research and other education levels (if applicable).**

Content of specialty programmes included in the study programme has been designed in accordance with the European Standards in Medical Training recommended by the European Union of Medical Specialists or recommendations in the specific specialty of the European Union of Professional Associations. This ensures the content of high-level programme, including by integrating the achievements and insights of the current field of science into the relevant speciality programme.

**3.2.3. Assessment of the study programme including the study course/ module implementation methods by indicating what the methods are, and how they contribute to the achievement of the learning outcomes of the study courses and the aims of the study programme. In the case of a joint study programme, or in case the study programme is implemented in a foreign language or in the form of distance learning, describe in detail the methods used to deliver such a study programme. Provide an explanation of how the student-centred principles are taken into account in the implementation of the study process.**

Each specialty programme is structured into specialty study courses that residents must undergo to become a qualified specialist. The study course description specifies the aim, tasks, planned learning outcomes, seminar plan, list of manipulations to be mastered and the minimum number of performance thereof, type of study course examination. Study course descriptions for residents are available in e-learning, and residents familiarise with them at the beginning of each study course. In

total, the study process is organised taking into account the principles of student-centred education. The following principles of student-centred education are observed in the implementation and assessment of the study process (which are described in more detail in the following examples): a resident primarily studies independently, establishing a mutual discussion with the teaching industry professional, in the study process the resident has clear learning outcomes, aims and instruments to be achieved by his/her studies to measure achievements. The study content is interconnected, the study tasks are complex, interacting with each other and ensure deep learning. A lecturer, who conducts a resident training, conducts the resident's training process by progressively reducing the monitoring and control component, the resident receives feedback from the lecturer.

**Types of study implementation used that intertwine all of the following sections of resident education:** lectures (problem lectures) and theoretical practical classes, interactive seminars, individual practical and scientific research paper, mastering of practical manipulation, including the use of simulators, clinical problem analysis, clinical case presentation, patient education, independent specialty literature studies, discussions and clinical case discussions with physicians entitled to train and other colleagues, including residents, e-learning.

**Practical training** is a daily practice that takes place in parallel and in the context of theoretical education. The study programme (in residency) the person has the status of a working student. This is determined by the law of the Republic of Latvia. Therefore, a relatively large part of the study programme is placement, in which involvement of potential employers in the implementation of the programme has been necessary since the beginning of studies. The responsible persons of the medical treatment institution cooperate with the heads of specialty programmes in the organisation of seminars. Study course placement is supervised by physicians entitled to teach and it is provided that a maximum of three residents are required to study with one physician at a time. In practical training, residents perform medical care of patients in clinical or outpatient institutions, family doctor's practices, as well as other activities according to the specifics of the specialty (for example, examination of tissues, laboratory material, etc.) under the individual supervision or monitoring of a physician entitled to teach.

During studies, practical training of each resident takes place in several medical treatment institutions (including regional hospitals) in accordance with the requirements of the study course, thus purposefully ensuring both the optimal way to achieve the learning outcome, broadening the perspective of residents and familiarising them with possible workplaces. During placement, the resident must perform and acquire the manipulation and skills specified in the study programme up to the level of autonomous fulfilment. For the development of practical skills, residents have duty shifts in clinics, departments or outpatient institutions, the profile of which corresponds to the study course to be studied. In specialties where no duty shifts are provided in the study programme (for example, "Dermatologist, venerologist", "Pathologist"), they are replaced by independent work of another nature.

**Pedagogical work of residents.** Residents under the guidance of RSU teaching staff participate in the education process of students and residents of younger years, training of patients and their affiliates, thus developing knowledge in interaction and acquiring skills not only to learn but also to teach others and to speak publicly, develop argumentation skills by working individually, with small groups of students, using a variety of interactive teaching tools. Residents participate in the preparation of lectures, seminars and clinical demonstrations. This resident's education section is essential, and the inclusion of pedagogical work as an integral component has also been welcomed by international resident education experts such as experts from the European Board and College of Obstetrics and Gynaecology (in the process of international accreditation as an excellency centre of the specialty programme "Gynaecologist, obstetrician").

**Theoretical education** is organised at three levels:

- the first, general education, takes place in the form of mandatory discussion days, classes in small groups in the form of case studies and theoretical seminars. They cover an in-depth and comprehensive explanation of interdisciplinary medical problems, latest news in medical law, patient safety problems, research methodology and statistical processing of acquired data, content and methodology of pedagogical work, guidelines for communication, reasoning and creating presentations, search for medical information in online media and other information required for residents of all specialties. These educational activity classes are organised for residents of all specialties and years of studies, determining the necessary total number of theoretical education classes to be mastered in the academic year;
- the second, specialised, takes the form of specialty seminars where, in interactive form, including interaction, namely discussion with other specialty residents, as well as with the seminar lecturer, who is the leading specialist in the topic of the sector concerned – residents deepen the necessary theoretical knowledge;
- the third, placement-related, is discussion of clinical cases and resolution of problems in a clinic that takes place individually (the medical practitioner responsible for practical training of residents supervises not more than three residents at a time).

**Scientific research paper.** Residents write a scientific research paper in the penultimate and final year of residency. In the penultimate year, the resident defines the topic of scientific research paper and, in cooperation with the head of the specialty programme, a paper supervisor is designated, who is a representative of the academic staff of RSU or, in exceptional cases, a representative of the relevant sector with professional experience in research. During the paper development process, residents have access to expert advice from the RSU Statistical Laboratory, which provides support for the selection of research methods and for the correct statistical processing of the data obtained.

**Assessment system.** A variety of knowledge assessment methods are used during studies: multiple-choice tests, essays, descriptions of clinical problem solutions, case presentations and other principal skills are assessed by observation of performance in the workplace, by observation of demonstrations on a manikin or simulator, and by testing objectively structured clinical skills. Both formative and summative assessment is used in the study process. Formative assessment takes place during everyday study process by asking control questions to the resident during the practical training, as well as by discussing different clinical cases at seminars. Summative assessment is used at the end of study courses by organising the examination in the written form, in the form of oral discussions or in a mixed form.

Medical residents' knowledge and skills are assessed with a grade on a 10-point scale. The lowest permissible assessment is 4 ("almost satisfactory"). The assessment procedure is described in Academic Regulations II.

For each study course the resident receives two assessments – placement and theoretical part. The acquisition of practical skills is evaluated by the head of practical training, while the head of the specialty programme organises the examination of theoretical knowledge of study courses. Resident's placement is assessed monthly by a physician under whose supervision the resident works. The assessment is made electronically by completing a special questionnaire.

An important element of the assessment system is the discussion between the resident and the head of the specialty programme, which is organised not less than twice a year by the head of the specialty programme. During the talk, the head of the specialty programme listens to the self-assessment of the resident regarding the training process, discusses and assesses the progress of mastering of the study programme (progress of achievement of learning outcomes), positive

aspects and potential problems. The result of the assessment and the recommendations for the next stage shall be entered in the Resident's Book. A wide range of transversal skills, including attitude and communication, are also essential to the physician's professionalism. This is assessed during the discussion in three areas: professional improvement, team work, attitude towards the patient and his/her relatives. In certain specialties, such as the specialty "Surgeon", not only the individual discussions between the resident with the head of the specialty programme, but also the 360° assessment system have started to be used, where the assessment received from the staff of the medical treatment institution with whom the resident cooperates on a daily basis, as well as the self-assessment of the resident is also compiled to ensure the maximum objective assessment.

During residency, the studying physician fulfils all the requirements of the study programme:

- all study courses provided for in the specialty programme should be mastered, where both clinical skills and theoretical knowledge assessment should be successfully passed;
- the manipulations foreseen in the programme should be performed; at least 80% of theoretical education activities should be attended;
- pedagogical work should be carried out;
- a research paper should be written; the national degree examination in residency should be successfully passed, which also assesses the research paper of the resident.

The success of residents is first analysed in the RSU academic units, to which specialty programmes are attached. Cases of academic failure are examined at FR Council meetings. Meetings of heads of specialty programmes analyse both the results of the national degree examination, the situation in admission of residents and the necessity and changes to the development of the programme.

In the course of the implementation of the programme, the principal specialties include, as a mandatory section, interim examinations organised to assess the knowledge, skills and competences acquired by the resident during that period (most often after the second year of residency studies, but may also be more frequent depending on the planning of the specialty programme) and to assess the ability of the resident to become more professionally independent, that is to say, to switch from work under the direct supervision of a certified physician to work under the leadership of a certified physician.

Clinical situation assignments have been selected as the form of examination in interim examinations and the national degree examination in residency in almost all specialties. Such a type of examination in a situation as close as possible to the actual professional circumstances facilitates and enables the assessment of the medical resident's ability to link the acquired theoretical knowledge with practical skills, to select from the description of the case provided the key information necessary for the decision on therapy and to assess the medical resident's ability to pursue his/her professional activity entirely independently.

Knowledge, skills and competences acquired during the medical resident's study process and professional compliance with certification in specialty are assessed at the end of the national degree examination in residency and the specialty certification examination. Learning outcomes in the national degree examination in residency are assessed by the commission, which consists of RSU teaching staff, representatives of professional associations and employers (medical treatment institutions). During the reaccreditation phase, 99.8% of graduates have received a specialty certificate in the national degree examination and at the end of the specialty certification examination, i.e. permission to work independently in the particular specialty, indicating that the study programme "Residency in Medicine" achieves the stated aim.

**3.2.4. If the study programme envisages an internship, describe the internship opportunities offered to students, provision and work organization, including whether the higher education institution/ college helps students to find an internship place. If the study programme is implemented in a foreign language, provide information on how internship opportunities are provided in a foreign language, including for foreign students. To provide analysis and evaluation of the connection of the tasks set for students during the internship included in the study programme with the learning outcomes of the study programme (if applicable).**

The study programme does not provide for placement as it is set in the Cabinet Regulations No 305 of 13 June 2023 "Regulations regarding the State Standard for Professional Higher Education". In accordance with the Medical Treatment Law, a resident is a working student who, while undertaking the professional activity of a doctor, acquires the knowledge, skills and competences specified in an accredited study programme. Namely, the practical part is implemented within the framework of the employment relationship as work-based training. A resident's book is used to record and assess the knowledge, skills and competences of residents. The e-book was introduced in the academic year 2023/2024, since partial digitisation has been started.

**3.2.5. Evaluation and description of the promotion opportunities and the promotion process provided to the students of the doctoral study programme (if applicable).**

**3.2.6. Analysis and assessment of the topics of the final theses of the students, their relevance in the respective field, including the labour market, and the marks of the final theses.**

The subject of scientific research paper is selected by the medical resident in cooperation with the head of the specialty programme, taking into account the research directions implemented by the RSU department attached to the specialty of the resident, as well as the research and current problems implemented within the framework of the workplace or clinical base unit of the medical resident.

The topics of scientific research of medical residents correspond both the current problems of each specialty and public health in general and contribute to their resolution by providing scientific knowledge. For example, in both academic year 2020/2021 and academic year 2021/2022, residents actively focused on research into the effects of overcoming COVID-19 virus infection in patients of the particular specialty. Medical residents of dental sub-specialties focus on research into various modern technologies in orthodontics, dental prosthetics, etc. The fact that the vast majority (89%) of scientific research papers are highly assessed (with distinction or excellent), including accepted as scientific articles in peer-reviewed international medical journals or as verbal or stand posters at international scientific conferences, also supports the relevance of the topics. For example:

- the scientific article written by a medical resident of the infectology specialty (co-author), which looks at hepatic fibrosis caused by COVID-19, was published in an international scientific peer-reviewed medical journal (*BMC Gastroenterology*);
- the scientific paper written by a medical resident of the cardiology specialty on the relationship between plasma microRNA 126, -145 and -155 and the characteristics of atherosclerotic plaques was published in an international scientific peer-reviewed medical journal (*Journal of Clinical and Translational Research*);
- oral presentation by a medical resident of a laboratory doctor's specialty at the international industry congress (*European Congress of Clinical Microbiology and Infectious Diseases*) with a report on laboratory diagnosis of parasites in Latvia;
- oral presentation by a medical resident of the narcology specialty to the international industry congress (*European Congress of Psychiatry*) with research results on the variability of specific drugs in the case of ADHS symptoms in outpatient patients of the Riga Centre of Psychiatry and Narcology.

Enclosed:

Annex 22. Topics of students' final papers.

### 3.3. Resources and Provision of the Study Programme

**3.3.1. Assessment of the compliance of the resources and provision (study provision, scientific support (if applicable), informative provision (including libraries), material and technical provision, and financial provision) with the conditions for the implementation of the study programme and the learning outcomes to be achieved by providing the respective examples.**

When assessing the resources and provision base of StP, it is divided into two parts:

- the study implementation base in medical treatment institutions where practical (including duty shifts) and theoretical training, partly the development of scientific research paper, of residents takes place;
- the study implementation base for the part of studies provided by RSU – practical training in the simulation study course and theoretical seminar, study courses “Theoretical Education Provided by RSU”, “Scientific Research Paper”.

Training of medical residents in a specific **medical treatment institution** depends on specialty and a specific study course within the scope of specialty. Depending on this, the training takes place both in medical treatment institutions which are leading centres of excellence in the sector concerned, clinics of the relevant profile of clinical university hospitals, specialised hospitals, outpatient medical institutions and family doctor's practices. Each medical treatment institution is selected as a training base following a thorough assessment of its quality and capacity, the availability of appropriate material and technical bases, including high standards of medical technology provision.

RSU has improved the material and technical base for the development of training processes for medical residents in medical treatment institutions, which at the same time are RSU clinics. During the reaccreditation period, an RSU Study Campus has been created at Riga East Clinical

University Hospital, where medical technologies intended specifically for the training process of residents have been purchased, for example, a workstation for radiology residents was purchased in 2020 (including modern software for visualisation and processing of radiological images). RSU clinics have been created and the material and technical base (medical technologies) has been improved for the training process of residents at Daugavpils Regional Hospital, Liepaja Regional Hospital, Vidzeme Hospital and North Kurzeme Regional Hospital.

The **material and technical base provided by RSU** for the training of medical residents has been substantially improved in line with modern medical education standards since the previous reaccreditation process. The infrastructure of the RSU Medical Education Technology Centre has been developed and the simulation-based resident training process has been developed. Every year, medical residents of all specialties participate in a seminar – simulation training in cardiopulmonary resuscitation and acute situations. The specialty programmes anaesthesiologist, reanimatologist, paediatric surgeon, general practitioner, gynaecologist, obstetrician, surgeon, paediatrician, ophthalmologist, trauma doctor, orthopaedist and urologist all include simulation training, playing out different simulation scenarios as a pilot project in the academic year 2021/2022, and regularly from academic year 2022/2023.

*Figure 5. Simulation education for paediatric residents*



*Figure 6. Cardiopulmonary resuscitation practical seminar*



Also, resident training on living tissue at the Doctors Safe Train Centre has started since the previous reaccreditation. These are theoretical and practical trainings on living tissue in conditions as close as possible to the actual clinical situation. Starting from ac.y. 2022/2023, these trainings have been determined as a mandatory study course and study component in the specialties of paediatric surgery, general practitioner, gynaecologist, obstetrician, invasive radiologist, surgeon and urologist. A video of the training process can be found [here](#).



For the improvement of theoretical knowledge in the practical training process, as well as for writing a scientific research paper, medical residents use the resources and databases provided by the RSU Library. The RSU Library provides full support for the implementation of a modern process of residency studies, both by providing study materials in person and online and, if necessary, by rapidly ordering new study materials according to the needs of RSU lecturers. Several evidence-based medical databases provided by the RSU Library should be mentioned as practical training support for residents: *UpToDate*, *DynaMed* and *Cochrane Library*.

From the e-platforms provided by RSU, RSU medical residents use two main sites: the Student portal MyRSU and the e-learning. MyRSU and e-learning contain all necessary information about studies and the process thereof, as well as different services provided by the university: electronic schedules of classes, final course assessments, application forms, information about finances, RSU student's private email inbox, access to *Office 365*, self-service printing management (printing, scanning, photocopying), questionnaires for assessment of the study course and programmes, study course descriptions, application for receipt of a written statement regarding the student's status, documents regulating the studies (internal and external laws and regulations), online databases, current information on student life.

The section "E-databases" of the MyRSU portal provides access from any location to the electronic databases for example, *EBSCO*, *Ebook Central (ProQuest)*, etc. In the e-learning environment, medical residents have access to information on specialty programmes (programme documentation, study course descriptions, seminar plans, rotation plans, interim examination questions and other information prepared and uploaded by the head of the specialty programme), e-learning course of theoretical education provided by the RSU, writing of a scientific research paper and the national degree examination in residency, as well as a section with up-to-date information for medical residents.

A Resident e-book has been actively developed since academic year 2021/2022 (planning and registration of the resident's study process in a fully digital format). It is planned that the first sections of it could be introduced for use in academic year 2022/2023.

Enclosed:

Annex 23.1. Assessment of the informative and methodological provision regarding Library resources for the implementation of the study direction "Health Care" in accordance with the requirements of the guidelines.



**resources provided within the framework of cooperation with other science institutes and higher education institutions (applicable to doctoral study programmes) (if applicable).**

**3.3.3. Indicate data on the available funding for the corresponding study programme, its funding sources and their use for the development of the study programme. Provide information on the costs per one student within this study programme, indicating the items included in the cost calculation and the percentage distribution of funding between the specified items. The minimum number of students in the study programme in order to ensure the profitability of the study programme (indicating separately the information on each language, type and form of the study programme implementation).**

According to the Cabinet Regulations No 685 "Procedure for Admission and Posting of Residents and Financing of Residency" (hereinafter - the Cabinet Regulations), the Ministry of Health administers the financial resources allocated for the training of residents. Every year, the Ministry of Health concludes a contract with RSU on training of medical residents and the allocation of financial resources for the training. According to the Paragraph 25.2 of the Cabinet Regulations, medical institutions are allocated EUR 3807.60 per calendar year per resident to cover the costs of theoretical and practical training of a resident, which is intended to remunerate doctors and other teaching staff and to cover the costs of organising the residency. Whereas, RSU receives EUR 1297.68 per resident per calendar year from the state budget, which RSU uses to pay for expenses related to the training of the resident, including the salary of university teachers and the resident's research activity during the residency.

Reimbursement expenses for residents are defined by external laws and regulations and are fully covered by the Ministry of Health.

The average number of budget residents in 2022 was 552 residents, for whom RSU received funds from the Ministry of Health for training of residents in accordance with the Cabinet Regulations and the mutually concluded contract. The allocated funds have been used in full.

The StP is implemented by RSU Department of Anaesthesiology and Intensive Care, Department of Paediatric Surgery, Department of Occupational and Environmental Medicine, Department of Biology and Microbiology, Department of Obstetrics and Gynaecology, Department of Family Medicine, Department of Internal Diseases, Department of Infectology, Department of Surgery, Department of Neurology and Neurosurgery, Department of Ophthalmology, Department of Orthopaedics, Department of Otorhinolaryngology, Department of Pathology, Department of Paediatrics, Department of Psychiatry and Narcology, Department of Psychosomatic Medicine and Psychotherapy, Department of Radiology, Department of Rehabilitation, Department of Oral and Maxillofacial Surgery, Department of Orthodontics, Department of Prosthetic Dentistry, Department of Conservative Dentistry and Oral Health.

## **3.4. Teaching Staff**

**3.4.1. Assessment of the compliance of the qualification of the teaching staff members (academic staff members, visiting professors, visiting associate professors, visiting docents, visiting lecturers, and visiting assistants) involved in the implementation of the study programme with the conditions for the implementation of the study programme and the provisions set out in the respective regulatory enactments. Provide information on how the qualification of the teaching staff members contributes to the achievement of the learning outcomes.**

Considering the organisation of the residency process, there are several groups of lecturers involved in the implementation of the StP.

Lecturers provided by RSU:

- heads of specialty programmes – industry professionals who develop the training content of each specialty programme, plan and lead the training process of the medical resident, including plans and supervises the educational and scientific research paper of the medical resident in cooperation with the medical resident;
- RSU theoretical education activity lecturers – industry professionals, including RSU lecturers, who teach various interdisciplinary theoretical seminars, as mentors participate in mandatory discussion days.

Lecturers provided by a medical treatment institution:

- physicians entitled to train – professionals in the relevant field who practically implement the practical and theoretical training (seminar) process of a resident according to the content plan of the head of the specialty programme.

Lecturers, whose qualification and abilities are of high level and assessed over a long period of cooperation, are involved in the **implementation of specialty programmes**. The head of the specialty programme who is a high-level professional in the relevant sector, most often the head or a member of the board of the professional association of the specialty and thus is involved in the supervision of the content of the management and continuing education of the specialty at national or international level. For example, the head of the specialty “Anaesthesiologist, reanimatologist” Assoc. Professor Oļegs Sabeļņikovs since 2021 has been elected President of the Anaesthesiology Section of European Union Medical Specialities (UEMS EBA), the head of the specialty “General Practitioner” dr. Līga Kozlovskā is head of the Latvian Association of Rural General Practitioners and part of the Strategic Council of Health Sector of the Ministry of Health, head of the specialty “Infectologist” Professor Indra Zeltiņa is chief specialist of the Ministry of Health in infectology, etc.

All heads of specialty programmes also work in research and are authors of international scientific publications, participate in industry congresses, international trainings, most (78%) are elected lecturers of RSU departments who also ensure the existence of appropriate pedagogical and study content development skills. Those heads of speciality programmes, who are not lecturers of departments, are leading industry specialists, including heads of clinics, in medical treatment institutions.

A total (including acting persons ) of 16 professors (20%), 22 associate professors (27%), 8 assistant professors (10%), 2 lead researcher (2%), 8 lecturers (10%), 7 assistants (9%) and 19 professional physicians (22%), who are not in an employment relationship with RSU as department lecturers are heads of specialty programmes.

Several heads of specialty programmes have improved their professional academic qualifications in

the period since the last accreditation – for example, the head of the specialty programme “Internist” Inga Stukēna has become an associate professor, the head of the specialty programme “Gynaecologist, obstetrician” Jana Žodžika has become an associate professor, the head of the specialty programme “Pneumonologist” Dace Žentiņa has become a lecturer, etc.

Lecturers, who are experts in the respective area are involved in the implementation of **theoretical education provided by RSU**. For example, information and medical information search classes are taught by chief librarian of the RSU Library Daiga Spila. She has long experience and up-to-date pedagogical skills in teaching information literacy courses. Classes in medical technology assessment are led by the administrative head of the Health Management Lecturer Group and lecturer Daiga Behmane. The cycle of theoretical lectures in health systems management is led by top manager of different health care system institutions *Dr. med.* Dins Šmits, he has education in medical sciences and management sciences.

Heads of specialty programmes and lecturers of theoretical education provided by RSU also actively participate in the training for the improvement of professional skills implemented by RSU. From 1 January 2017 to 1 October 2022, 58 lecturers of Residency in Medicine participated in continuing education activities of the RSU Centre for Educational Growth attending a total of more than 120 training activities of different content. The lecturers of the study programme spent 4330 academic hours on mastering continuing education activities.

The lecturers participated in the following activities: Reference management tool *EndNote*; Remote work of student groups with the *Miro* tool; Open access to scientific information; *Contextualizing the use of Webinar in Higher Education*; *Creating Engaging and Interactive Classrooms through Active Learning Techniques*; The *PubMed* database and its tools for searching for scientific publications; Possibilities and comparison of *Web of Science* and *Scopus* databases; Digital nuisances – changes and innovations encouraging organisations to change; Think Tank: how to assess to learn?; Creation of electronic tests; Interactive presentations and real-time feedback in the *Mentimeter* tool; Creating interactive content in the e-learning environment (*H5P*); The potential of immersive technologies for effective learning strategies; Improvisation in pedagogical activities; How games activate teaching and learning; How to promote the acquisition of transversal skills relevant to the working environment in the study process; Research methodology and statistical processing of data; Visualization of content in presentations; Development of a study course; Formulation and evaluation of learning outcomes; Creating videos: complex in a simple and short way and many other.

The lecturers of the **education** or practical training and theoretical seminars **implemented by a medical treatment institution** are determined by the head of the specialty programme, upon agreement with the employee of the relevant medical treatment institution responsible for the residency study process and the physician himself/herself. For this work, the head of the specialty programme selects highly qualified professionals in the relevant field, if possible – with previous experience in the training of students (pedagogical skills). In certain specialties, taking into account the specificities of the sector and programme, the head of the specialty programme also determines additional quality requirements. Thus, for example, in specialty “General Practitioner”, the study courses “Family Medicine I” and “Family Medicine II” set additional quality criteria for the general practitioner, with whom medical residents will study – the physician’s practice must include both paediatric and adult patients; the physician’s practice should perform various manipulations (in line with the professional interests of the medical resident, such as cardiography, ultrasonography); the medical resident must be fully provided with a separate workplace and a room with access to the electronic systems necessary for the work of the general practitioner, etc.

The list of physicians who train medical residents, including their role in the training of medical

residents (practical/theoretical training), is also defined in the cooperation agreements between RSU and medical treatment institutions on the training of medical residents as an Annex, noting that those professionals comply with the requirements of the applicable laws and regulations, which are defined to be able to train medical residents – are physicians re-certified in the specialty.

Enclosed:

Annex 24.6. Declaration on Doctoral Degrees, LCS Experts – Applicable to Doctoral Study Programmes.

Annex 24.7. Analysis of the Composition of Teaching Staff.

### **3.4.2. Analysis and assessment of the changes to the composition of the teaching staff over the reporting period and their impact on the study quality.**

Changes in **heads of specialty programme** have been insignificant since the previous reaccreditation. If any head of a specialty programme withdrew from his/her position, then another head of the relevant high qualification programme was nominated instead, keeping the high-quality management of the specialty programme (for example, in the specialty “Cardiologist”, the new head of the programme is Professor Kārlis Trušinskis, in the specialty “Infectologist” – Professor Indra Zeltiņa, in the specialty “Surgeon” – Assoc. Professor Zenons Narbutis).

Other heads of specialty programmes were also attracted to certain speciality programmes to gradually ensure the replacement of generations in the management of the programme and/or to attract a head of the programme from a medical treatment institution (clinical base unit leading the sector) (for example, Assoc. Prof. Elga Bataraga was appointed as the second head of the programme in the specialty “Dermatologist, venerologist”, lect. Daiga Auziņa was appointed as the second head of the programme in the specialty “Haematologist”, dr. Jānis Stašulāns – as the second head of the programme in the specialty “Laboratory Doctor”, etc.).

Changes in the staff of **teachers of theoretical education provided by RSU** are minor and are mainly related to the thematic change of theoretical education activities included in this study course and thus the change of lecturers to provide a lecturer of high level for the respective theoretical seminar/lesson, the inclusion of whom contributes to the quality of the programme. Thus, for example, Kristīne Joanna Golubeva, a lecturer with a long-standing experience in personnel management in a medical treatment institution and the integral coach of transformation and managers, was involved as a lecturer for the newly created cycle of classes “Coaching Methods for Improvement of Management Skills” and the theoretical lecture “Improvement of Management Skills”. A laboratory doctor and the head of the education process in a laboratory dr. Jānis Stašulāns was involved as a lecturer for the cycle “Range of Laboratory Examinations in Physician’s Practice”. Meanwhile, Daiga Behmane, a lecturer in the cycle of classes “Evaluation of Medical Technology”, has significantly improved her qualifications in the period since the previous reaccreditation, getting a doctoral degree and becoming an RSU lecturer.

### **3.4.3. Information on the number of the scientific publications of the academic staff members, involved in the implementation of doctoral study programme, as published during the reporting period by listing the most significant publications published in Scopus or WoS CC indexed journals. As for the social sciences, humanitarian sciences, and**

the science of art, the scientific publications published in ERIH+ indexed journals or peer-reviewed monographs may be additionally specified. Information on the teaching staff included in the database of experts of the Latvian Council of Science in the relevant field of science (total number, name of the lecturer, field of science in which the teaching staff has the status of an expert and expiration date of the Latvian Council of Science expert) (if applicable).

**3.4.4. Information on the participation of the academic staff, involved in the implementation of the doctoral study programme, in scientific projects as project managers or prime contractors/ subproject managers/ leading researchers by specifying the name of the relevant project, as well as the source and the amount of the funding. Provide information on the reporting period (if applicable).**

**3.4.5. Assessment of the cooperation between the teaching staff members by specifying the mechanisms used to promote the cooperation and ensure the interrelation between the study programme and study courses/ modules. Specify also the proportion of the number of the students and the teaching staff within the study programme (at the moment of the submission of the Self-Assessment Report).**

When looking at cooperation between teaching staff, the specifics of StPs should be taken into account. When training medical residents in a medical treatment institution, mutual cooperation between teaching staff (training physicians) is implemented in the daily work of the clinic and in regular departmental meetings. In specialties where training physicians have less chance of daily contact because they do not work in the same medical treatment institution (e.g. family medicine), RSU organises seminars for family doctors training medical residents at least once a year. At seminars, the heads of the specialty programme set out in detail the conditions for the implementation of the programme, the organisation of studies, there are discussions, exchange of opinions and exchange of good practice.

When assessing the training section of medical residents implemented by the higher education institution, teaching staff implement mutual cooperation during discussion days organised by the institution of higher education and at meetings of heads of specialty programmes. Discussion days are a theoretical education activity in which medical residents of several specialties, led by the head of the specialty programme, present interesting clinical cases to the audience on a specific topic. For example, in academic year 2021/2022, there was cooperation by analysing various clinical cases on the topic of cough and headache, in academic year 2021/2022 – on Munchausen's syndrome and infertility, in academic year 2022/2023, discussion days on the topic of patient safety and violence were planned. Meetings of managers of specialty programmes organised 2-3 times a year are used to discuss current issues, changes in the study process, as well as exchange of thought and examples of good experience regarding implementation of the programme in different specialties are presented.

In the implementation of the StP, the ratio of students and teaching staff in practical training is determined by national regulatory enactments. Regulations of the Cabinet of Ministers No. 685 of 30 August 2011 “Resident Admission, Distribution and Residency Funding Procedure” provide that one physician shall train not more than three residents. This principle is included and incorporated into the agreements between the higher education institution and medical treatment institutions on the training of residents. The specialty “General Practitioner” has even stricter conditions, stipulating that no more than two residents study with one family doctor at a time.

# Annexes

III - Description of the Study Programme - 3.1. Indicators Describing the Study Programme		
Sample of the diploma and its supplement to be issued for completing the study programme	24.1_Annex_Diploma_sample.pdf	24.1_piel_diploma_paraugs.pdf
For academic study programmes - Opinion of the Council of Higher Education in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions (if applicable)		
Compliance of the joint study programme with the provisions of the Law on Higher Education Institutions (table) (if applicable)		
Statistics on the students in the reporting period	16_Annex_Statistical_data_students_Residency.pdf	16_pielik_Rezidentura_medicina_statistika_lv.pdf
III - Description of the Study Programme - 3.2. The Content of Studies and Implementation Thereof		
Compliance with the study programme with the State Education Standard	17.1_Anx_National_educ_standard_Residency.pdf	17.1_pielik_atbilstiba_valsts_izglitiba_standartam_Rezidentūra_lv_jaunais.pdf
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard or the requirements for professional qualification (if applicable)		
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)	17.2_Anx_MK268_mapping_Residency.pdf	17.2_pielik_MK268_kartejums_Rezident_lv.pdf
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	18.1_St_course_outcomes_mapping_Residency.pdf	18.1_St_kursu_StP_rezult_kartejums_Rezidentura_medicina.pdf
The curriculum of the study programme (for each type and form of the implementation of the study programme)	19_Anx_Study_Plan_Residency_in_Medicine.pdf	19_pielik_Planojums_Rezidentūra_LV_precizēts.pdf
Descriptions of the study courses/ modules	20_Anx_Residency_All_Programms_Study_course_description_4436_pages.pdf	20_pielik_Rezident_Visu_Programmu_Kursu_Apraksti_LV_4403_lpp.pdf
Description of the organisation of the internship of the students (if applicable)	09_Anx_Student_placement_Residency.pdf	09_Prakse_Rezidenta_gramata_prakses_vietas.pdf
III - Description of the Study Programme - 3.4. Teaching Staff		
Confirmation that the academic staff of the doctoral study programme includes not less than five doctors, of which at least three are experts approved by the Latvian Council of Science in the branch or sub-branch of science in which the study programme intends to award a scientific degree (if applicable)		
Confirmation that the academic staff of the academic study programme complies with the requirements specified in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions (if applicable)		

# Orthotics and Prosthetics (42722)

Study field	Health Care
ProcedureStudyProgram.Name	Orthotics and Prosthetics
Education classification code	42722
Type of the study programme	Professional bachelor study programme
Name of the study programme director	Ēriks
Surname of the study programme director	Švēde
E-mail of the study programme director	eriks.svede@rsu.lv
Title of the study programme director	Mg.sc.sal.
Phone of the study programme director	
Goal of the study programme	<i>Train qualified functional specialists - orthopaedic technicians, who, through evidence-based practice, carry out examination of a person, manufacture custom-made technical aids, using technical orthopaedic medical technology.</i>
Tasks of the study programme	<p><i>Provide the acquisition of specific professional knowledge, skills and abilities in the healthcare, rehabilitation and social services system on the basis of a multi-level study placement system. Develop professional skills and competence appropriate to the general level of practice, apply evidence-based medical and rehabilitation technologies in treatment and reduction of functional impairment.</i></p> <p><i>Develop students' understanding of the place, role and tasks of technical orthopaedics in the field of medical and social services.</i></p> <p><i>Develop scientific research skills in line with the requirements for the Bachelor of health care and arouse interest in pursuing a professional and academic career.</i></p>



Results of the study programme	<p><b>Knowledge:</b></p> <p>1. Able to demonstrate the knowledge, skills and abilities in the professional field corresponding to the qualification of orthopaedic technician, enabling the creative examination, assessment, treatment, counselling and education of patients/clients using technical orthopaedic technologies, aimed at promoting, improving, restoring and maintaining the functional abilities of patients/clients in individuals or groups of individuals representing various age groups.</p> <p>2. Understand human functioning and its impairments at the levels of organ and organ systems, activities and participation in the context of environmental and personal factors.</p> <p><b>Skills:</b></p> <p>3. Knowledge of the main types of technical orthopaedic products - prostheses, orthoses, orthopaedic footwear, etc. - and the principles of their manufacture and use in the overall treatment and rehabilitation process; Ability to advise and carry out the manufacture and adaptation of prostheses, orthoses, orthopaedic footwear and other technical aids, and to train patients in their use. Ability to plan and carry out research independently within the scope of the requirements for the Bachelor's thesis in health care. Ability to describe the research process and requirements for the organisation of evidence-based treatment.</p> <p>4. Knowledge of research methodology in order to participate in research and related projects and to evaluate own professional performance.</p> <p><b>Competencies:</b></p> <p>5. Ability to work in a professional rehabilitation team. Ability to solve problems creatively in complex and unpredictable situations, working with patients/clients and carrying out organisational tasks within the scope of their professional activity; interpret data obtained in the examination, treatment and rehabilitation of patients in order to support the professional activity of an orthopaedic technician in medicine and apply them in medical practice.</p> <p>6. Able to articulate the legal, moral and ethical aspects of interacting with and providing services to patients and/or clients of social services.</p>
Final examination upon the completion of the study programme	Examination

## Study programme forms

### Full time studies - 4 years - latvian

Study type and form	Full time studies
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Duration in full years	4
Duration in month	0
Language	latvian
Amount (CP)	160
Admission requirements (in English)	Secondary education
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	Professional Bachelor's Degree in Health Care
Qualification to be obtained (in english)	Orthopaedic Technician

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

### 3.1. Indicators Describing the Study Programme

**3.1.1. Description and analysis of changes in the parameters of the study programme made since the issuance of the previous accreditation form of the study field or issuance of the study programme license, if the study programme is not included on the accreditation form of the study field, including changes planned within the evaluation procedure of the study field evaluation procedure.**

Table 1. Changes in StP parameters

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period	Planned changes within the assessment procedure
1.	Study direction	-	-
2.	Title of StP	-	-
3.	Code according to the Latvian Education Classification	-	-
4.	Head of StP	-	-
5.	Scientific degree of the Head of StP	-	-
6.	Aim of StP	Updated.	-
7.	Tasks of StP	Updated.	-
8.	Learning outcomes to be achieved	Updated.	-
9.	Final examination upon the completion of StP	-	-
10.	Type and form of studies	-	-

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period	Planned changes within the assessment procedure
11.	Duration of implementation	-	-
12.	Language of implementation	-	-
13.	Volume of StP (CP)	-	-
14.	Admission requirements	Updated.	-
15.	Degree to be awarded	-	-
16.	Qualification to be awarded	-	-
17.	Place of implementation	-	-

Table 1 shows that the formulation of the aim of the study programme has been updated since the previous accreditation. Admission requirements to the study programmes have been changed supplementing them with a centralized examination (CE) certificate in mathematics and an annual grade in biology or life sciences.

**3.1.2. Analysis and assessment of the study programme compliance with the study field. Analysis of the interrelation between the code of the study programme, the degree, professional qualification/professional qualification requirements or the degree and professional qualification to be acquired, the aims, objectives, learning outcomes, and the admission requirements. Description of the duration and scope of the implementation of the study programme (including different options of the study programme implementation) and evaluation of its usefulness.**

The graduation from the study programme “Orthotics and Prosthetics” provides a professional Bachelor’s degree in health care with an orthopaedic technician’s qualification. The volume of the study programme is 160 CP / 240 ECTS, it is implemented in four years intramurally. The language of studies is Latvian.

The aim of the study programme is to prepare orthopaedic technicians – functional specialists who implement evidence-based practice and are able to perform evaluation of patients and take decisions regarding the manufacture or adaptation of the necessary technical aids. Graduates of the study programme are familiar with technical orthopaedic medical technologies and general medical treatment methods.

Tasks of the study programme:

- to ensure the acquisition of specialist professional knowledge, skills and abilities in the health care and rehabilitation and social services system, based on a multi-level study placement system; to develop professional skills and competences appropriate to the level of general practice, to apply effective evidence-based medical, including prosthetic and orthotic, rehabilitation technologies in the treatment and reduction of functional disorders;
- to develop students’ understanding of the place, role and tasks of technical orthopaedics in the field of medical treatment and social services;
- to develop scientific research skills in accordance with the requirements of the Bachelor of Health Care and to encourage interest and motivation in the continuation of professional and academic careers.

Learning outcomes of the study programme:

- ability to work in a professional rehabilitation team and ability to solve problems creatively in difficult and unpredictable situations, working with the patient / client and carrying out organisational duties within the scope of their professional activities; to interpret data of the results of examination, treatment and rehabilitation of patients obtained in medical treatment for ensuring professional activities of an orthopaedic technician and use them in medical treatment;
- knowledge of research methodology to participate in research and related projects and to assess own professional activities;
- To know the types of main technical orthopaedic products – prostheses, orthoses, orthopaedic shoes, etc. – and the principles for the manufacture and use thereof in the overall treatment and rehabilitation process; ability to advise and manufacture and adapt prostheses, orthoses, orthopaedic shoes and other technical aids, as well as to train the patient in their use; to plan and carry out research independently in the amount of the requirements of the Bachelor’s thesis, to be able to describe the research process and requirements in organising evidence-based treatment;
- professional knowledge, skills and abilities relevant to the orthopaedic technician’s qualification, enabling to conduct creatively patient / client examination, evaluation, treatment, consulting and education using technical orthopaedic technology, and aimed at promoting, improving, restoring and maintaining the functional capacity of patients / clients in individuals or groups of different ages;
- To be familiar with functioning of the human body and its disorders at levels of organ and organ systems, activities and participation in the context of environmental and personal factors;
- To be able to formulate legal, moral and ethical aspects in communication with patients and / or clients of social services in the provision of services.

Admission requirements in the study programme “Orthotics and Prosthetics” are appropriate to the

objectives and tasks specified in the study programme, which include the following requirements: secondary education, assessment of centralized examinations in mathematics, Latvian language, foreign language and the annual grade in biology or life sciences.

The content of the study programme is designed in such a way that the aims and learning outcomes of the programme are appropriate, form the basis for the successful mastering of the orthopaedic technician's profession. There is a strong demand for graduates of the study programme. This shows that the programme prepares professionals whose skills and knowledge are in line with labour market requirements.

### **3.1.3. Economic and/ or social substantiation of the study programme, analysis of graduates' employment.**

The study programme "Orthotics and Prosthetics" is the only Bachelor level study programme in Latvia that prepares medical practitioners in the speciality of orthopaedic technician. The demand for orthopaedic technicians in the local labour market is stable, and the number of specialists prepared by Rīga Stradiņš University is sufficient. After graduating from the study programme, specialists work in technical orthopaedics companies and specialise in the manufacture or sale of orthoses, prostheses, orthopaedic shoes and other technical aids. Orthopaedic technicians work in a rehabilitation team in both public and private institutions. Alumni work for companies such as "National Rehabilitation Centre" Vaivari", "national Ltd.", "REHAD" Ltd., "DDA Orthopaedics" Ltd., "Technical orthopaedics" Ltd., "Prosthetic and Orthopedic Centre" Corp., "Unihaus" Ltd. and others.

With reference to the [information in website](#) of the International Society for Prosthetics and Orthotics (ISPO), it is known that 0.5% of the world's population, or 35-40 million people, need technical orthopaedics services. As the world's population and life expectancy increase, so do the number of people with disabilities who need tailor-made technical aids. Thus, by the mid-21<sup>st</sup> century, the proportion of the world's population in need of technical orthopaedic services can reach 1% of the world's population.

The availability of prosthetic and orthotic services brings economic benefits for users of technical aids who can return to the labour market, family, community after they become ill. The need for health services is dwindling as technical aids accelerate recovery and shorten the amount of time a person spends in medical facilities after becoming ill. The use of technical aids contributes to personal independence by reducing the costs of promoting health and the need for social assistance.

These services can stimulate economic growth by providing a more productive workforce, as well as have a direct impact on the development of the technical orthopaedics sector, which allows the production of high-quality technical aids such as prostheses and orthoses. The development of the technical orthopaedics sector is an economic investment and failure to make such an investment has negative consequences: limited access to services for persons with functional disorders, which contributes to their exclusion, isolation, dependence and poverty, which entails increased costs for society and the state in the long run.

To ensure improvement of the quality of studies, the content of the courses is also reviewed, based on both developments in the sector and information in questionnaires answered by students regarding courses. There is also regular communication with employers to find out the current skills required in graduates of the study programme.

Twice in a calendar year meetings of the Study Quality Council with participation lecturers, students, employers and industry experts are organised.

**3.1.4. Statistical data on the students of the respective study programme, the dynamics of the number of the students, and the factors affecting the changes to the number of the students. The analysis shall be broken down into different study forms, types, and languages.**

An average of 18 students are admitted to the study programme. The smallest number of students were enrolled in 2017 – 16 students, but the highest number of students enrolled was in 2019 and 2020, when 21 students were enrolled. An average of five students graduate the programme – the smallest number in 2019 and 2021 – four graduates. In 2020, there were no graduates in the study programme. The highest number of graduates was registered in 2018 – six students.

Most of students drop out from the study programme in the 1<sup>st</sup> year of studies, 12.5 students on average, of whom 4.5 students leave because they withdraw from the studies and an average of 7.3 students leave because of poor academic performance. Surveys of students revealed that the students enrolled to the study programme often understand what the study programme and the profession to be mastered are in the 1<sup>st</sup> year of studies. StP admission conditions have been changed to promote the selection of knowledgeable and motivated students. Measures to support the recognition of the study programme have taken place in cooperation with the RSU Communication Department. Their aim is to raise awareness of the orthopaedic technician's profession among applicants and to reduce withdrawals of students from studies because they chose a study programme that was not appropriate to them. The number of students dropping out in the second, third and fourth years of studies is small, they drop out most often due to academic failure or withdraw.

There are 14 state-funded study places and four study places for tuition fee in the study programme. Although there is a high drop-out of students and a small number of graduates, it is sufficient for the Latvian labour market. Graduates of the study programme work in technical orthopaedics companies manufacturing customised technical aids, as well as perform administrative work in state institutions.

Students have the opportunity to participate in the Erasmus+ mobility programme. RSU cooperates with Ljubljana University in Slovenia and Thomas More University of Applied Sciences. Before the COVID-19 pandemic, every year, two 4<sup>th</sup> year students went for a three-month placement to Slovenia. As part of Erasmus+ mobility RSU also admitted students of orthotics and prosthetics from Slovenia and one student from Belgium in 2017, 2018 and 2019. There has been no Erasmus+ student exchange since 2019 as host universities were unable to accept international students due to the COVID-19 pandemic. When participating in the Global Educators Meeting conference organised by the international professional organisation ISPO in 2022, contacts were established with Jönköping University, with which it is planned to develop student mobility in different formats in the future, both in personal study visits and remote exchange of experience.

**3.1.5. Substantiation of the development of the joint study programme and description and evaluation of the choice of partner universities, including information on the development and implementation of the joint study programme (if applicable).**

## 3.2. The Content of Studies and Implementation Thereof

**3.2.1. Analysis of the content of the study programme. Assessment of the interrelation between the information included in the study courses/ modules, the intended learning outcomes, the set aims and other indicators with the aims of the study course/ module and the aims and intended outcomes of the study programme. Assessment of the relevance of the content of the study courses/ modules and compliance with the needs of the relevant industry, labour market and with the trends in science on how and whether the content of the study courses/ modules is updated in line with the development trends of the relevant industry, labour market, and science.**

The content of the study programme is designed in such a way that students have the opportunity to successively acquire the knowledge and skills necessary for the profession of orthopaedic technician. The curriculum has been designed in such a way that first there are courses that provide knowledge of functioning of the human body, evaluation of functional abilities, basic principles of research and materials and technologies used in technical orthopaedics. The acquired knowledge is the basis for taking study courses related to different medical disciplines, including technical orthopaedics. The study programme consists of general educational social and humanities courses in the amount of 13 CP / 19.5 ECTS, basic courses in the amount of 71 CP / 106 ECTS, professional specialisation courses in the amount of 70 CP/105 ECTS and elective courses in the amount of 6 CP / 9 ECTS. (According to the amendments of Article 1, Clause 8 of the Law on Higher Education Institutions, which entered into force on October 11, 2022, by December 31, 2024, RSU will implement the transition to the European credit transfer and accumulation system. During this period of development of the self-assessment report, the RSU continues to indicate the actual amount of credit points in Latvia and the amount of credit points of the European Credit Transfer System (ECTS).)

In the first year of studies, courses such as “Anatomy”, “Physiology”, “Biology”, etc. are taken to give the student a thorough knowledge of functioning of a human body. In the course “Introduction to Professional Studies and Research”, the student learns the basics of research, as well as get the idea regarding the role of different specialties in the rehabilitation process, including knowledge regarding the profession of orthopaedic technician, work environment and specialisation possibilities. At this stage, the student takes courses of major importance in the orthopaedic technician’s profession, such as “Biomechanics”, “Learning Materials” and “Processing Materials”, which form the basis for other specialised courses. In the first year of studies, students also take social and humanities courses. They help to develop student’s social and organisational skills.

In the second year of studies, students continue to take professional courses in technical orthopaedics, such as the course “Orthotics with Firm Orthosis” and “Orthotics with Soft Orthosis”, which integrates previous knowledge about functioning of a human body, biomechanics and technical sciences. At this stage, they also accumulate knowledge about infection and internal diseases, surgery, neurology, pathological physiology, pharmacology, as well as the basics of clinical care.



In the third year of studies, in professional technical orthopaedics courses, students master upper and lower limb prosthetics, modelling of individually manufactured technical aids using CAD-CAM technologies, as well as familiarise themselves in depth with principles of orthotics in the course “Clinical Orthotics”. In the third year, research principles and data analysis are deepened, which are essential knowledge for a student to carry out research work in the fourth year of studies. Students take courses “Basic Physiotherapy”, “Basics of Diagnostic Radiology”, “Special Orthopaedics” and “General Rehabilitation”, which develop comprehensive knowledge of the treatment process. In the study course “Electrotechnics” students acquire knowledge of the principles of operation of motorised, electronic technical aids, as well as develop skills to search for information regarding different technical solutions in the manufacture of aids.

In the fourth year of studies, clinical placement takes place, in which a student learns the clinical knowledge of technical orthopaedics in functional evaluation of patients, manufacture of technical aids and training of patients to use different types of technical aids. The fourth year of studies is the time when the student formulates the topic of his or her Bachelor’s thesis, it is approved at the Faculty of Rehabilitation, and during the year of studies the student prepares the Bachelor’s thesis, which he or she defends at the end of the spring term. The learning process ends with the defence of the Bachelor’s thesis and a national degree examination. After they are successfully passed, the student obtains a Bachelor’s degree in health care.

The content of the study programme has been developed in conjunction with the orthopaedic technician’s profession standard, employer surveys, and international guidelines issued by the International Society for Prosthetics and Orthotics. Study content and course descriptions are reviewed and updated at least once per calendar year. The study content is updated on the basis of employer surveys and industry science trends, contacts with other European institutions of higher education implementing similar study programmes are maintained.

The curriculum provides the student with the necessary knowledge to understand the general principles of rehabilitation, as well as the role of an orthopaedic technician in the rehabilitation team. The courses included in the curriculum and successive mastering allow the outcomes of the study programme to be achieved.

**3.2.2. In the case of master’s and doctoral study programmes, specify and provide the justification as to whether the degrees are awarded in view of the developments and findings in the field of science or artistic creation. In the case of a doctoral study programme, provide a description of the main research roadmaps and the impact of the study programme on research and other education levels (if applicable).**

**3.2.3. Assessment of the study programme including the study course/ module implementation methods by indicating what the methods are, and how they contribute to the achievement of the learning outcomes of the study courses and the aims of the study programme. In the case of a joint study programme, or in case the study programme is implemented in a foreign language or in the form of distance learning, describe in detail the methods used to deliver such a study programme. Provide an explanation of how the student-centred principles are taken into account in the implementation of the study process.**

The studies are implemented in accordance with the aims and tasks set by RSU.

The implementation of the study programme is organised by the Dean's office of the Faculty of Rehabilitation, while the Department of Rehabilitation in cooperation with other departments attract appropriate academic staff for the study process and provide the resources necessary for the study process.

Various study methods are used for the implementation of the study process. Studies can take place in a regular manner and remotely, different formats are used: lectures, seminars, practical classes, discussions, independent work, situation analysis, etc. In the study process, the theoretical basis of courses is ensured during lectures, students strengthen the practical use during classes. For the implementation of the study process, a well-developed RSU e-environment is available, in which it is possible to implement online lectures, and lecturers can post recordings of lectures and classes. The e-environment makes it possible to add a variety of informative resources to the studio content to help better learn the study content. Students' knowledge can be tested in the RSU e-environment. Professional study courses take a student-centred approach involving students in clinical case analysis, enabling problems to be identified, analysed and structured solutions to be sought. Students participate in the learning process by reflexing the content of the course and the performance of tasks. Group work is being implemented, promoting students' skills to collaborate with the team and jointly find solutions to their assigned tasks.

To ensure the quality of study content, meetings of the Council of the Faculty of Rehabilitation and meetings of the Study Quality Council are organised, during which the content, quality, results of student surveys, academic performance, strengths and weaknesses of study courses, etc. are discussed. After analysis of strengths and weaknesses of study courses, adjustments are made if necessary. There are also surveys of students on organisation, content of courses and the work of lecturers. The lecturers involved in the implementation of a course provide feedback on the course assessments received.

Students' knowledge is assessed in tests and exams. Types of examinations such as test work, tests, practical and independent work, colloquiums, cumulative assessments can be used. Feedback from lecturers and students is obtained regarding the assessment of study courses and changes are made in the assessment process, if necessary. For a student to be able to achieve the aims and tasks of the study programme, it is necessary to obtain a positive assessment regarding the study content learned.

The national degree examination is a combined examination consisting of a practical and theoretical part. The national degree examination can take place in the RSU e-environment or on site. In the practical part of the national degree examination, students perform a clinical case analysis, but in the theoretical part a multiple-choice test is taken.

During the practical part, students conduct a clinical case analysis in the RSU e-environment: they draw a clinical case and prepare a written reply. In their reply, they should describe successively the clinical case analysis process, present a treatment plan, describe the rehabilitation technologies to be used and the work of the rehabilitation team, including the use of technical aids.

During the theoretical part, students complete a multiple-choice test of 100 questions in writing, in which one answer should be chosen from the answers offered. The test includes the topics learnt during the study process. The students do the test simultaneously. The test has been passed successfully if the student answers at least 55% of the questions correctly. The share of the test in the resulting assessment of the national degree examination is 30%.

The National Examination Board includes the chairman of the commission, commission members and a secretary. More than half of members of the commission are not from RSU, they are invited specialists in the field. Commission members can be academic staff of RSU and other higher education institutions, certified doctors and orthopaedic technicians. Tutorials are available in the study process and when preparing for the national degree examination.

When writing a Bachelor's thesis, the student should involve a Bachelor's thesis supervisor, who consults the student when he or she prepares the paper.

**3.2.4. If the study programme envisages an internship, describe the internship opportunities offered to students, provision and work organization, including whether the higher education institution/ college helps students to find an internship place. If the study programme is implemented in a foreign language, provide information on how internship opportunities are provided in a foreign language, including for foreign students. To provide analysis and evaluation of the connection of the tasks set for students during the internship included in the study programme with the learning outcomes of the study programme (if applicable).**

The study programme includes placement, which is implemented in the fourth year of studies. The number of placement sites is variable, those are five to seven technical orthopaedics companies and rehabilitation centres. Placement takes place in VSIA "Nacionālais rehabilitācijas centrs "Vaivari"", Vaivari Orthotics and Prosthetics Centre, SIA "REHAD", SIA "DDA Orthopaedics", SIA "Tehniskā ortopēdija", AS "Protezēšanas un ortopēdijas centrs", SIA "Unihaus". Each technical orthopaedics company specialises in the manufacture of various technical aids – prostheses, orthoses, orthopaedic shoes, as well as industrial technical aids, etc. It is possible for students to learn different technologies for the manufacture of individually manufactured technical aids – both conventional and 3D based manufacturing methods.

The number of placement sites required depends on the number of students and the capacity of the technical orthopaedics companies to take students for placement. During placement, students become familiar with the system of circulation of technical aids in Latvia.

Most technical orthopaedics companies where placement takes place are private. However, the state-owned company Vaivari Orthotics and Prosthetics Centre has the largest capacity for simultaneous admission of more students. Extensive placement opportunities provide students with a wide range of experience in the provision of technical aids and familiarise them with the provision of technical aids in a rehabilitation hospital. Placement is organised according competence sphere to a schedule so that students are rotated to all suitable placement sites.

The purpose of placement is to prepare students for the national degree examination and to provide the knowledge that will be required later in the daily life of the orthopaedic technician. During placement, students acquire a broad view of the technologies used in the manufacture of technical aids, this experience is combined with the clinical knowledge acquired in previous years of studies. By learning lower and upper limb prosthetics, students learn different techniques for measuring stumps and creating mouldings. Positive moulding modelling, including 3D modelling, and preparation for making a prosthetic shell are taught. Students learn various technologies for making prosthetic shells, as well as designing prosthetic structures on a stand. Depending on the clinical case, students are able to select the appropriate prosthetic components for the patient.

In the manufacture of hard orthoses, as in prosthetics, students also learn how to manufacture different types of individually manufactured orthoses, clinical evaluation of the patient and the principles for selecting the appropriate technical aid.

During soft orthosis manufacturing classes, students should be able to evaluate what technical aid the patient needs, they should understand the mechanism of operation of the chosen technical aid. The range of materials from which soft orthoses can be made is identified, as well as the technologies associated with the manufacture of soft orthoses are learned.

In their fourth year of studies, students use the opportunity to have placement in one of *Erasmus+* mobility cooperation universities, and in this case placement is in English. Similarly, placement is implemented in English for those international students, who study at RSU within the *Erasmus+* mobility programme.

The content of placement is developed in association with the knowledge acquired in previous years of studies, which is strengthened and supplemented with practical skills during placement. During placement, students write a placement logbook, recording the most relevant scientific and practical knowledge, they draw up a report on what has been learned during placement. The placement logbook is submitted for assessment at the end of the study process.

### **3.2.5. Evaluation and description of the promotion opportunities and the promotion process provided to the students of the doctoral study programme (if applicable).**

### **3.2.6. Analysis and assessment of the topics of the final theses of the students, their relevance in the respective field, including the labour market, and the marks of the final theses.**

Final papers of 26 students were defended during the reporting period. Students most frequently prepare their final papers as systematic literature reviews, studies and adaptations of evaluation instruments into Latvian to be used for rehabilitation. One of the most commonly studied topics is lower limb prosthetics, where students study various functions of prostheses, gait parameters, when moving with a prosthesis, as well as conduct surveys of lower limb prostheses users. The efficacy of compression clothing and various aspects related to the use of scoliosis corrective orthoses are also studied. Students mainly choose as their final paper supervisors RSU lecturers, who often also represent employers, and rarely choose lecturers from other universities.

The study "Adaptation of the support program "Exchange of experience of patients related to amputation" in Latvia" was an important, relevant research in the industry, in which the student's work served as the basis for the creation of the first support program in Latvia for persons after amputation. The involvement of a support person during rehabilitation is an internationally recognized practice and this type of study made it possible to improve the rehabilitation program for persons after amputation.

Evaluation tools and questionnaires adapted in the final paper are important as these papers make them available to local professionals, allowing them to work with the most up-to-date information available.

The papers are evaluated by the commission, which includes representatives of RSU and specialists outside RSU. Assessments of final papers range from almost satisfactory to excellent evaluation, most often students have received a good assessment. During the reporting period, there was one case where the student could not successfully defend a final paper.

### **3.3. Resources and Provision of the Study Programme**

#### **3.3.1. Assessment of the compliance of the resources and provision (study provision, scientific support (if applicable), informative provision (including libraries), material and technical provision, and financial provision) with the conditions for the implementation of the study programme and the learning outcomes to be achieved by providing the respective examples.**

The acquisition of practical knowledge in the study programme is organised in various technical orthopaedics institutions, which form a stable and, where necessary, adaptable practical study base. The possibility of creating a technical orthopaedics workshop in RSU premises was assessed, but due to the high costs and lack of premises the idea has been found unprofitable.

Placement in various technical orthopaedics workshops enables students to acquire a wide range of experience on the principles for the manufacture of technical aids and the organisation of work in technical orthopaedics companies of different sizes. Placement sites can learn how to make technical aids using different technologies, both digital and conventional.

Regular procurement is carried out to provide materials and raw materials necessary for the study process, which are used by students for the performance of limb mouldings and for the manufacture of technical aids. Plaster casts, high temperature thermoplastics, fabrics, sewing accessories, various resins for the manufacture of products using laminating technique, adhesives, etc. are purchased. The university transfers the materials to placement sites as needed. The university also purchases the necessary protective equipment for the study process in technical orthopaedic workshops: respirators, noise-cancelling headphones, etc.

Various equipment and instruments, such as sewing machine and hand tools, placed at placement sites have been purchased to ensure the study process. The courses “CAD-CAM Technologies in Rehabilitation”, “Clinical Orthotics”, “Clinical Placement I”, “Clinical Placement II” teach three-dimensional technology using the university-owned 3D scanner and software for processing 3D models, and uses open access software.

In the future, it is not planned to make significant procurements for the development of the technical base, a greater emphasis is laid on developing cooperation with the best technical orthopaedics institutions of Latvia, as well as it is planned to promote pedagogical growth of lecturers by inviting them to participate in activities for improving professional qualifications.

The technical base of studies is considered sufficient, it conforms to the specifics of the study programme and allows the learning outcomes of studies to be achieved. In the future, it is necessary to continue cooperation with Latvian technical orthopaedics institutions and European cooperation universities to acquire the most up-to-date knowledge and practical skills of students.

Five e-book databases and eleven full-text databases of journals are available for the study

program "Orthotics and Prosthetics" in the provision of e-resources. The availability of e-resources is the same in all structural units of the Library.

E-books on orthotics, prosthetics, as well as on research methods are available in the subscribed databases *ebook Academic Collection (EBSCO)*, *Ebook Central (Proquest)*, *AccessMedicine*, *ClinicalKey* and *SAGE Research Methods*. For example, the database *ebook Academic Collection (EBSCO)* has 147 ebooks when searching for the keywords "Orthotics OR Prosthetics NOT Dentistry", and *Ebook Central (Proquest)* has 39 ebooks when searching for the subject *ClinicalKey* and *AccessMedicine*. Book chapters are available by searching for the keywords "Orthotics OR Prosthetics".

Full texts of **scientific articles** on orthotics, prosthetics are available in the subscribed databases: *Sage Premier 2023*, *Health Research Premium Collection (ProQuest)*, *MEDLINE Complete (EBSCO)*, *Communication Source (EBSCO)*, *Sociology Source Ultimate (EBSCO)*, *Academic Search Complete (EBSCO)*, *Wiley Online Journals*, *PsycARTICLES (APA)*, *BMJ Journals*, *ClinicalKey journals (Elsevier)*, *Science Direct (Elsevier)*. In Primo's unified search engine, 6,939 journal titles appear in the "Health Sciences" sector, and 86 journal titles in the "Orthopaedics" sub-sector. Subscribed e-journal databases provide results of selected information when searching by various topics/keywords, for example, *Health Research Premium Collection (ProQuest)* has 18,802 publications on the topic "Orthotics OR Prosthetics NOT Dentistry", *MEDLINE Complete (EBSCO)* has 100,119 publications, while in the *Wiley Online Journals database* – 83339 publications.

Four **evidence-based medicine databases** *ClinicalKey Clinical Overviews (Elsevier)*, *The Cochrane Library (Wiley)*, *DynaMed (EBSCO)*, *UpToDate* are also available.

Dissertations from many countries of the world in various branches of science, including orthotics and prosthetics, are available in the database *ProQuest Dissertations & Theses Global: The Sciences and Engineering Collection*.

Students also have access to such news and reference databases as *Encyclopedia Britannica Academic Edition*, *Letonika*, *LETA news archive*, *Nozare.lv*, *News.lv (Lursoft)*.

The e-books mentioned in the study programs are collected in [the list of recommended study e-books](#) on the library's website - both purchased and from subscribed databases (a section such as "Orthotics and prosthetics" is available).

### **3.3.2. Assessment of the study provision and scientific base support, including the resources provided within the framework of cooperation with other science institutes and higher education institutions (applicable to doctoral study programmes) (if applicable).**

### **3.3.3. Indicate data on the available funding for the corresponding study programme, its funding sources and their use for the development of the study programme. Provide information on the costs per one student within this study programme, indicating the items included in the cost calculation and the percentage distribution of funding between the specified items. The minimum number of students in the study programme in order to ensure the profitability of the study programme (indicating separately the information on each language, type and form of the study programme implementation).**

It is planned to finance the study programme from the state budget and the funds of private and legal persons by setting the tuition fee in accordance with the state budget funding without social security in the amount of EUR 4890 of study year. Discounts on tuition fees are possible in accordance with internal regulatory documents. The number of students planned to reach in the four years of the study programme is 51 students, with 19 students admitted in the first year of studies, with 8 students predicted to drop out in the second years of studies, the number of students remaining consistent in the third year, and decreasing to 10 students in the fourth year of studies. After high inflation and rapid increase in energy prices, the result of the full-time study programme with such tuition fee per year is negative due to the lack of funding from the state budget in accordance with the Cabinet Regulations No. 994 – the basic costs of studies no longer cover infrastructure maintenance costs. Information on the additional funding allocated for the performance funding, approved in the budget of the Ministry of Education and Science, will be available on 2<sup>nd</sup> half of 2023.

The funding is used for staff remuneration, attraction of visiting lecturers, taxes, maintenance of IT infrastructure, purchase of equipment and facilities and expenditure on study visits. In addition to the direct costs of delivering lectures and conducting classes, the study programmes have to cover infrastructure maintenance costs (premises, IT solutions) and costs of other RSU common resources used in the study programmes. (Student services, Library, organisation of the study process, grant to the Student Union and other support and administrative functions).

The study programme is implemented by the Department of Rehabilitation of the Faculty of Rehabilitation, Department of Welfare and Social Work, Department of Nursing and Midwifery, Department of Public Health and Epidemiology, Department of Sports and Nutrition, Department of Health Psychology and Paedagogy of the Faculty of Public Health and Social Welfare, Department of Anaesthesiology and Intensive Care, Department of Occupational and Environmental Medicine, Department of Biology and Microbiology, Department of Human Physiology and Biochemistry, Department of Physics, Department of Internal Diseases, Department of Infectology, Department of Surgery, Department of Neurology and Neurosurgery, Department of Pathology, Department of Psychosomatic Medicine and Psychotherapy, Department of Radiology, Statistics Unit, Department of Clinical Skills and Medical Technology and Department of Morphology of the Faculty of Medicine, Department of Pharmacology of the Faculty of Pharmacy and the Language Centre. Remuneration of academic staff for the first year of the study programme is planned at approximately EUR 48 000.

Table 2. Cost of the Study Programme

<b>Title</b>	<b>Outcome with the existing tuition fee</b>
Average revenue per student, EUR	4 914
Average cost per student, EUR	5 548
Academic staff, %	46
Resources of departments, %	4
Other direct expenditure, %	2

Students' clinical training and placement costs, %	2
Scholarship costs, %	5
Ongoing costs, %	5
Overhead costs, %	36

### 3.4. Teaching Staff

**3.4.1. Assessment of the compliance of the qualification of the teaching staff members (academic staff members, visiting professors, visiting associate professors, visiting docents, visiting lecturers, and visiting assistants) involved in the implementation of the study programme with the conditions for the implementation of the study programme and the provisions set out in the respective regulatory enactments. Provide information on how the qualification of the teaching staff members contributes to the achievement of the learning outcomes.**

The qualification of the lecturers involved in the study programme allow the aims and the learning outcomes of the study programme to be achieved. 63 lecturers are involved in the implementation of the study programme, representing different scientific sectors, such as health sciences, social sciences, natural sciences, etc., thus implementing an interdisciplinary approach for the provision of the study programme. 18 lecturers with a doctoral degree and 22 lecturers with a Master's degree are involved in the study process.

The lecturers involved in the implementation of professional courses in technical orthopaedics are professional practitioners – certified orthopaedic technicians. Lecturers regularly improve their qualification at Latvian and global scientific conferences and seminars, as well as improve their technical skills by having traineeship in European technical orthopaedics companies, learning current technologies and methods for the manufacture of technical aids. Lecturers attended the technical orthopaedics conference and international exhibition in OTWorld in Leipzig on several occasions, participated in the Global Educators Meeting organised by ISPO, and in further training events organised by associations for Prosthetics and Orthotics of other European countries.

The orthopaedic technicians involved in the implementation of the study programme are members of the Latvian Association of Prosthetics and Orthotics, some of whom work on the board of the association. Four orthopaedic technicians involved in the study programme – Kārlis Lācis, Viesturs Drunks, Vita Deičmane and Ēriks Švēde – have obtained the status of a person entitled to train.

From 1 January 2017 to 1 October 2022, 41 lecturers of the study programme “Orthotics and Prosthetics” participated in continuing education activities of the Centre for Educational Growth attending more than 160 training activities of different content. The lecturers of the study programme “Orthotics and Prosthetics” spent 4125 academic hours on continuing education activities.



The lecturers participated in the following activities:

- Creation of animated visual studio materials;
- Reference management tool EndNote;
- Remote work of student groups with the Miro tool;
- Open access to scientific information;
- Collaboration and Partnership Towards Professional and Sectoral Development: Local, National, Transnational;
- Contextualizing the use of Webinar in Higher Education;
- Creating Engaging and Interactive Classrooms through Active Learning Techniques;
- The PubMed database and its tools for searching for scientific publications;
- Possibilities and comparison of Web of Science and Scopus databases;
- Digital nuisances – changes and innovations encouraging organisations to change;
- Teaching in intercultural environments;
- Think tank: How to assess to learn?;
- Think tank: Feedback as a sources of cognition and possibility to improve oneself;
- Creation of electronic tests;
- EndNote tool for management of references online;
- Interactive presentations and real-time feedback in the Mentimeter tool;
- Potential of immersive technologies for efficient learning strategies;
- Improvisation in pedagogical activities;
- How games activate teaching and learning;
- How to promote the acquisition of transversal skills relevant to the working environment in the study process;
- How to create effective image and text compositions in teaching materials;
- Potential of conflict for building cooperation;
- Research methodology and statistical processing of data;
- Mediation – wilful and responsible conflict resolution culture at a university;
- Visualization of content in presentations;
- Development of a study course. Formulation and evaluation of learning outcomes;
- Turnitin: How to assess students' papers more qualitatively and effectively?;
- Creating videos: complex in a simple and short way.

When summarising information on the lecturers, who are RSU graduates, it has been concluded that 35 lecturers graduated from an RSU study programme (from one up to three), but seven lecturers study in one of the study programmes right now (in academic year 2022/2023).

### **3.4.2. Analysis and assessment of the changes to the composition of the teaching staff over the reporting period and their impact on the study quality.**

There were changes in teaching staff in professional courses on technical orthopaedics of the study programme in the reporting period. Additional lecturers were involved in courses “Orthotics with Firm Orthosis”, “Orthotics with Soft Orthosis”, “Lower Limb Prosthetics”, “Learning Materials”, “Processing Materials”, “Biomechanics”. The purpose of involvement of lecturers is to ensure continuity of the study process, development of the content of courses and the attraction of new academic staff to the Faculty of Rehabilitation. The lecturers involved in the implementation of courses are graduates of StP “Orthotics and Prosthetics”, who promote continuity of the study content.

In the study course “Biomechanics”, professor Jānis Vētra was replaced by three lecturers: Guna Semjonova, Darja Ņesteroviča and Dina Grīnberga. In the study courses “Learning Materials” and “Processing Materials” lecturer G. Raipalis was replaced by Zane Zibulāne and Viesturs Drunks. In the course “Lower Limb Prosthetics”, Kārlis Lācis was replaced by Viesturs Drunks and Ēriks Švēde. In the course “Orthotics with Soft Orthosis” A. Drunka was replaced by D. Rūse. In the course “Orthotics with Firm Orthosis” Ēriks Švēde was replaced by Ieva Kalupa, who, together with Vita Deičmane, also leads the course “Orthopaedic Shoes”.

The invited lecturers have obtained a Master’s degree in Health Care, as well as accumulated experience working as orthopaedic technicians by specialising in one of disciplines of technical orthopaedics. Some lecturers are active in research, studying industry-relevant topics and participating in local and international conferences.

The attraction of lecturers was possible mainly due to an increase in RSU graduates with Master’s level education. When lecturers are attracted, the workload of lecturers is balanced and the risks that may arise when one lecturer reads several courses without replacement, are mitigated.

The attraction of new lecturers can be characterised as difficult given the small number of specialists in the industry. Contributing factors in attracting lecturers are the possibility of remote lectures and classes, as well as the conducting practical classes at the lecturers’ place of practice.

Attraction of foreign lecturers for remote lectures is being considered.

Changes in the composition of lecturers are positive, the lecturers involved get actively involved in academic processes, helping to shape the content of the study programme by suggesting improvements to the programme. Lecturers supervise final papers of students, review them and participate in national examination boards. They participate in Study Quality Council meetings. Students have mostly positively evaluated the courses read by invited lecturers.

**3.4.3. Information on the number of the scientific publications of the academic staff members, involved in the implementation of doctoral study programme, as published during the reporting period by listing the most significant publications published in Scopus or WoS CC indexed journals. As for the social sciences, humanitarian sciences, and the science of art, the scientific publications published in ERIH+ indexed journals or peer-reviewed monographs may be additionally specified. Information on the teaching staff included in the database of experts of the Latvian Council of Science in the relevant field of science (total number, name of the lecturer, field of science in which the teaching staff has the status of an expert and expiration date of the Latvian Council of Science expert) (if applicable).**

**3.4.4. Information on the participation of the academic staff, involved in the implementation of the doctoral study programme, in scientific projects as project managers or prime contractors/ subproject managers/ leading researchers by specifying the name of the relevant project, as well as the source and the amount of the funding. Provide information on the reporting period (if applicable).**

**3.4.5. Assessment of the cooperation between the teaching staff members by specifying the mechanisms used to promote the cooperation and ensure the interrelation between the study programme and study courses/ modules. Specify also the proportion of the number of the students and the teaching staff within the study programme (at the moment of the submission of the Self-Assessment Report).**

In RSU, there are a number of mechanisms for cooperation among teaching staff that contribute to the smooth running of the study process and the interconnection of content. Students evaluate study courses twice a year, but the lecturers involved in the courses provide feedback. If necessary, changes are made to the content of courses or to the composition of lecturers, the director of the study programme coordinates communication among lecturers, if uniform changes are necessary in several courses.

At meetings of the Study Quality Council, lecturers, students and representatives of the technical orthopaedics sector communicate on matters related to the quality of studies and development directions of the study programme, immediate feedback from all participants of the meeting is received regarding the pressing matters.

Questions regarding the content of study programmes and study courses may be discussed during council and department meetings of the Faculty of Rehabilitation, which take place once a month, and meetings of directors of study programmes, which take place once a semester. The director of the study programme communicates to the lectures involved in the implementation of the courses what was discussed at the meetings as needed.

When new lecturers are involved in the study process, they are informed about the significance of the course in the overall curriculum, and communication with the lecturers of related courses is promoted. For example, during the process of replacing the lecturers of the course "Biomechanics", the lecturers of the professional technical orthopaedics course ("Lower Limb Prosthetics", "Orthotics with Firm Orthosis") were contacted regarding the interconnection of content and a decision was taken regarding the involvement of the lecturers of the course "Biomechanics" in the study course.

In the assessment of students' knowledge in study courses, in which several lecturers are involved, for example, in courses "Clinical Placement I" and "Clinical Placement II", lecturers jointly assess students' skills and knowledge by agreeing on the assessment of the course.

The ratio of the number of students and teaching staff in the study programme is: 44 students and 63 lecturers. The ratio of students to teaching staff is 0.7.

# Annexes

III - Description of the Study Programme - 3.1. Indicators Describing the Study Programme		
Sample of the diploma and its supplement to be issued for completing the study programme	24.1_Anx_Sample_Diploma_and_Supplement_PBSP_Orthotics_and_Prosthetics.pdf	24.1_Diploms_un_pielikums_PBSP_Ortozesana-protezesana.pdf
For academic study programmes - Opinion of the Council of Higher Education in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions (if applicable)		
Compliance of the joint study programme with the provisions of the Law on Higher Education Institutions (table) (if applicable)		
Statistics on the students in the reporting period	16_Anx_Statistics_Orthotics_Prosthetics.pdf	16_pielik_Ortozesana-protezesana_statistika_lv.pdf
III - Description of the Study Programme - 3.2. The Content of Studies and Implementation Thereof		
Compliance with the study programme with the State Education Standard	17.1_pielik_PBSP_OrtoProt_atbilstiba_izglitiba_standartam_ENG.pdf	17.1_pielik_PBSP_OrtoProt_atbilstiba_izglitiba_standartam.pdf
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard or the requirements for professional qualification (if applicable)	18.2_ENG_profesijas_standarta_kartejums_Ortozesana_protezesana.pdf	18.2_profesijas_standarta_kartejums_Ortozesana_protezesana.pdf
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)	17.2_Anx_Compliance_with_Field-Specific_Regulations_Orthotics-Prosthetics.pdf	17.2_pielik_Atbalstiba_nozares_specifikajam_regulejumam_Ortozesana-protezesana.pdf
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	18.1_Anx_Study_Course_Mapping_Orthotics_and_Prosthetics.pdf	18.1_Studiju_kursu_kartejums_studiju_rezultatu_sasniesanai_Ortozesana_protezesana.pdf
The curriculum of the study programme (for each type and form of the implementation of the study programme)	19_pielik_STP_planojums_Ortozesana-protezesana_ENG.pdf	19_pielik_STP_planojums_Ortozesana-protezesana.pdf
Descriptions of the study courses/ modules	20_Anx_Study_course_description_Orthotics_Prosthetics.pdf	20_pielik_Kursu_apr_Ortozesana_protezesana.pdf
Description of the organisation of the internship of the students (if applicable)	9_Anx_Organisation_of_student_placement_Orthotics_Prosthetics.pdf	9_pielikums_Studejoso_prakses_organizacijas_apraksts_Ortozesana_protezesana.pdf
III - Description of the Study Programme - 3.4. Teaching Staff		
Confirmation that the academic staff of the doctoral study programme includes not less than five doctors, of which at least three are experts approved by the Latvian Council of Science in the branch or sub-branch of science in which the study programme intends to award a scientific degree (if applicable)		
Confirmation that the academic staff of the academic study programme complies with the requirements specified in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions (if applicable)		

# Medical Engineering and Physics (42527)

Study field	<i>Health Care</i>
ProcedureStudyProgram.Name	<i>Medical Engineering and Physics</i>
Education classification code	<i>42527</i>
Type of the study programme	<i>Professional bachelor study programme</i>
Name of the study programme director	<i>Oļegs</i>
Surname of the study programme director	<i>Sabelņikovs</i>
E-mail of the study programme director	<i>Olegs.Sabelnikovs@rsu.lv</i>
Title of the study programme director	<i>Dr. med.</i>
Phone of the study programme director	
Goal of the study programme	<i>To prepare qualified specialists – holders of a Professional Bachelor's degree in medical physics and medical physical technology engineers (according to the professional standard for a medical physical technology engineer) for professional work in the area of medical engineering and medical physics with professional knowledge in the composition of medical equipment, apparatus and instruments, physical and technical operating principles, manufacturing technology, terms of use and safety; with practical skills in work with medical equipment – purchase, installation, operation, adjustment and quality assurance, as well as skills for the planning and supervising of radiation technologies and dosimetry of patients and staff. To prepare for experimental research activities. To prepare students for continuing with professional Master studies.</i>

Tasks of the study programme	<p><i>To provide the knowledge and skills necessary for the performance of professional activity tasks, in accordance with the requirements of the profession standard for higher technical engineering education, medical physical technology engineer.</i></p> <p><i>To implement the acquisition of knowledge specific to the sector of medical engineering and medical physics, which provides the ability to develop new and improve existing systems, products and technologies by applying the latest advances of physics in medicine, as well as prepare for creative research and pedagogical work in the field of medical engineering and physics.</i></p> <p><i>To provide placement opportunities for the application of acquired knowledge in the fields of medical engineering and medical physics.</i></p> <p><i>To encourage students to analyse their knowledge and experience independently and learn them independently.</i></p> <p><i>To improve the professional foreign language proficiency of students.</i></p> <p><i>To educate students on matters of professional ethics by promoting their observance.</i></p> <p><i>To develop students' oral and written professional communication skills in the fields of medical engineering and medical physics.</i></p> <p><i>To develop students' skills of working in teams.</i></p>
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Results of the study programme	<p>1. Able to use the obtained theoretical knowledge and practical skills in the development and improvement of innovative equipment, devices and technologies used in medicine;</p> <p>2. Able to analyse medical equipment and technology development trends, as well as evaluate functional, economic and other pre-conditions justifying the need to design new equipment, devices and technologies used in medicine or re-design existing equipment, devices and technologies;</p> <p>3. In the design process, able to use traditional and modern computerised computation systems, design, manufacturing and processing technologies, taking into account environmental and civil protection, fire safety and hygiene requirements,</p> <p>4. Able to construct, design and service state-of-the-art equipment used in medicine;</p> <p>5. Able to analyse, evaluate, systematise and use the results of applied and scientific research in joint work with medical practitioners, biologists and other specialists, able to fit in team work, carry out creative and research work, able to substantiate and present own conceptual solution;</p> <p>6. Able to evaluate the conditions for the purchase of medical engineering equipment and technologies, manage the installation, use, adjustment of medical engineering equipment, develop appropriate testing methodologies;</p> <p>7. Able to assess the safety and security of state-of-the-art medical equipment and technologies, analyse the causes of damage to the equipment or system and organise their rectification, monitor, service, repair, test and calibrate medical equipment and technologies where necessary;</p> <p>8. Able to apply methodologies for engineering calculations for radiation source protection, develop and apply mathematical modelling models in radiation physics, biophysics and medical physics, able to perform dosimetric, radiometric and radiation spectrometry measurements and document them;</p> <p>9. Able to provide measures for the supply of radioactive radiation to the patient, as well as perform the necessary activities for ensuring radiation safety.</p>
Final examination upon the completion of the study programme	Bachelor's thesis and engineering project

## Study programme forms

### Full time studies - 4 years, 6 months - latvian

Study type and form	Full time studies
Duration in full years	4
Duration in month	6

Language	<i>latvian</i>
Amount (CP)	<i>180</i>
Admission requirements (in English)	<i>Secondary education</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	<i>Professional Bachelor's Degree of Medical Physics</i>
Qualification to be obtained (in english)	<i>Medical physical technology engineer</i>

#### **Places of implementation**

<b>Place name</b>	<b>City</b>	<b>Address</b>
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### **Full time studies - 4 years, 6 months - english**

Study type and form	<i>Full time studies</i>
Duration in full years	<i>4</i>
Duration in month	<i>6</i>
Language	<i>english</i>
Amount (CP)	<i>180</i>
Admission requirements (in English)	<i>Secondary education. Studies in English require knowledge of English of at least B2.</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	<i>Professional Bachelor's Degree of Medical Physics</i>
Qualification to be obtained (in english)	<i>Medical Device Engineer</i>

#### **Places of implementation**

<b>Place name</b>	<b>City</b>	<b>Address</b>
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007



### 3.1. Indicators Describing the Study Programme

**3.1.1. Description and analysis of changes in the parameters of the study programme made since the issuance of the previous accreditation form of the study field or issuance of the study programme license, if the study programme is not included on the accreditation form of the study field, including changes planned within the evaluation procedure of the study field evaluation procedure.**

Table 1. Changes in StP parameters

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period (until 2022)	Planned changes within the assessment procedure (after the accreditation)
1.	Study direction	—	—
2.	Title of StP	—	—
3.	Education classification code of the Republic of Latvia (Latvia)	The code according to the Latvian Education Classification was changed from 42 526 to 42 527.	—
4.	Head of StP	—	—
5.	Scientific degree of the Head of StP	—	—
6.	Aim of StP	—	—
7.	Tasks of StP	—	—
8.	Learning outcomes to be achieved	Change, they reduced from 16 to nine in accordance with QAHE instructions.	—

<b>No.</b>	<b>Parameter</b>	<b>Description and analysis of changes in StP parameters during the accreditation period (until 2022)</b>	<b>Planned changes within the assessment procedure (after the accreditation)</b>
9.	Final examination upon the completion of StP	—	—
10.	Type and form of studies	—	—
11.	Duration of implementation	—	—
12.	Language of implementation	—	—
13.	Volume of StP (CP)	In this accreditation period, the total number of credit points of the study programme changed from 181 CP to 180 CP. The total volume of placement changed from 26 CP to 25 CP.	In accordance with amendments to Section 1(8) of the Law on Higher Education Institutions, which entered into force on 11 October 2022, the transition to the European Credit Transfer and Accumulation System will be implemented until 31 December 2024.
14.	Admission requirements	—	—
15.	Degree to be awarded	—	—
16.	Qualification to be awarded	—	—

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period (until 2022)	Planned changes within the assessment procedure (after the accreditation)
17.	Place of implementation	—	—

Table 1 shows that since the previous accreditation the outcomes of StP have been clarified by reviewing and combining them, the number of outcomes reduced to nine (in accordance with QAHE instructions). The number of CPs of StP changed from 181 to 180, reducing the volume of placement (implemented by Riga Technical University, RTU) from 26 CP to 25 CP. The StP code in the RTU accreditation phase changed from 42 526 (other engineering sciences) to 42 527 (Medical engineering).

**3.1.2. Analysis and assessment of the study programme compliance with the study field. Analysis of the interrelation between the code of the study programme, the degree, professional qualification/professional qualification requirements or the degree and professional qualification to be acquired, the aims, objectives, learning outcomes, and the admission requirements. Description of the duration and scope of the implementation of the study programme (including different options of the study programme implementation) and evaluation of its usefulness.**

The joint professional Bachelor's study programme "Medical Engineering and Physics" has been developed in accordance with Regulations of the Cabinet of Minister (CM) of Latvia No. 512 of 26 August 2014 "[Regulations Regarding the Standard of Second Level Professional Higher Education](#)" (available in Latvian only), the [profession standard](#) for a medical physical technology engineer (available in Latvian only), and the requirements for the implementation of joint inter-university study programme defined in the Law on Higher Education Institutions, as well as the requirements of internal regulatory documents of Riga Stradiņš University (RSU) (see relevant annexes).

The enrolment of students to the joint StP is ensured by Riga Technical University. Students having secondary or vocational secondary education are enrolled to the study programme. Applicants are admitted to full-time undergraduate programmes based on the results of the centralized examinations (CE) in Mathematics, the Latvian Language and the Foreign Language, and the final grades in individual subjects obtained in the secondary education document, and the entrance examination results. If, in addition to these CEs, the applicant has a CE in Physics or Chemistry, the results of these CEs are taken into account in the ranking calculation. In accordance with RTU admission condition for international students, international applicants should pass entrance examinations in English (required volume of knowledge is at least level B2) and mathematics.

When graduating the study programme, students obtain a professional Bachelor's degree in

medical physical and the qualification of an engineer (medical physical technology engineer).

The **aim** of the study programme is to prepare qualified specialists – holders of a Professional Bachelor's degree in medical physics and medical physical technology engineers (according to the professional standard for a medical physical technology engineer) for professional work in the area of medical engineering and medical physics with professional knowledge in the composition of medical equipment, apparatus and instruments, physical and technical operating principles, manufacturing technology, terms of use and safety; with practical skills in work with medical equipment – purchase, installation, operation, adjustment and quality assurance, as well as skills for the planning and supervising of radiation technologies and dosimetry of patients and staff. To prepare for experimental research activities. To prepare students for continuing with professional Master studies.

**Tasks** of the study programme are:

- to provide the knowledge and skills necessary for the performance of professional activity tasks, in accordance with the requirements of the profession standard for higher technical engineering education, medical physical technology engineer;
- to implement the acquisition of knowledge specific to the sector of medical engineering and medical physics, which provides the ability to develop new and improve existing systems, products and technologies by applying the latest advances of physics in medicine, as well as prepare for creative research and pedagogical work in the field of medical engineering and physics;
- to provide placement opportunities for the application of acquired knowledge in the fields of medical engineering and medical physics;
- to encourage students to analyse their knowledge and experience independently and learn them independently;
- to improve the professional foreign language proficiency of students;
- to educate students on matters of professional ethics by promoting their observance;
- to develop students' oral and written professional communication skills in the fields of medical engineering and medical physics;
- to develop students' skills of working in teams.

**Knowledge, skills and competences** to be obtained in the study programme correspond to Level 6 of the European Qualifications Framework (EQF) and the Latvian Qualifications Framework (LQF), Level 5 of the Latvian professional qualification:

1. Able to use the obtained theoretical knowledge and practical skills in the development and improvement of innovative equipment, devices and technologies used in medicine;
2. Able to analyse medical equipment and technology development trends, as well as evaluate functional, economic and other pre-conditions justifying the need to design new equipment, devices and technologies used in medicine or re-design existing equipment, devices and technologies;
3. In the design process, able to use traditional and modern computerised computation systems, design, manufacturing and processing technologies, taking into account environmental and civil protection, fire safety and hygiene requirements,
4. Able to construct, design and service state-of-the-art equipment used in medicine;
5. Able to analyse, evaluate, systematise and use the results of applied and scientific research in joint work with medical practitioners, biologists and other specialists, able to fit in team work, carry out creative and research work, able to substantiate and present own conceptual

solution;

6. Able to evaluate the conditions for the purchase of medical engineering equipment and technologies, manage the installation, use, adjustment of medical engineering equipment, develop appropriate testing methodologies;
7. Able to assess the safety and security of state-of-the-art medical equipment and technologies, analyse the causes of damage to the equipment or system and organise their rectification, monitor, service, repair, test and calibrate medical equipment and technologies where necessary;
8. Able to apply methodologies for engineering calculations for radiation source protection, develop and apply mathematical modelling models in radiation physics, biophysics and medical physics, able to perform dosimetric, radiometric and radiation spectrometry measurements and document them;
9. Able to provide measures for the supply of radioactive radiation to the patient, as well as perform the necessary activities for ensuring radiation safety.

The duration of the study programme is four years and six months or nine semesters (180 credit points / 270 ECTS). Graduates of the study programme are demanded in the labour market, they work in medical institutions: hospitals, centres providing various medical services, as well as in representations of manufacturers of medical devices, as well as in public administration institutions (accreditation, controlling), which require special knowledge and competences in the field of medical equipment and technology.

The profession standard for a medical engineer provides for a number of competences related to the direction of healthcare and the RSU conducts a number of study courses corresponding to the direction of health care. To be able to evaluate analogue types of medical diagnostic, therapeutic or rehabilitation devices / equipment / systems to be designed, principles of physical operation, characteristics, usage peculiarities, as well as to choose conceptual and technical solutions for medical diagnostic, therapeutic or rehabilitation devices / equipment / systems (see basic tasks 4.1.1, 4.1.3 of professional activity in the profession standard for a medical physical technology engineer), students master the following study courses in the study programme: "Cell and Tissue Microstructure", "Anatomy", "Physiology", "Medical Instruments, Equipment and Systems, their Application", etc., therefore the StP part implemented by RSU corresponds to the study direction "Health Care".

In accordance with Annex 2 to Regulations of the Cabinet of Ministers No. 322 of 13 June 2017 (available in Latvian only), the StP code is 42 527, it corresponds to 42 – second level professional higher education (fifth level professional qualification and professional Bachelor's degree) or second level professional higher education (fifth level professional qualification), which is implemented after general or vocational secondary education. Thematic group of education – Engineering, manufacturing and construction, group of education programmes Medical Engineering – 527.

When assessing the possibility for the programme to be implemented in English, partner universities continue to maintain the following possibility as it provides the programme with development opportunities from various aspects:

1. Increasing the attractiveness of the programme for international students, the international education capacity of partner universities will be strengthened by promoting diversity, inclusive approach and exchange of cultures.
1. International students who study for a fee provide additional financial income to the partner higher education institution.
1. The need to ensure high quality education also includes the attraction of appropriate

teaching staff and academic resources.

1. Offered in English, the programme provides international students with the opportunity to improve their language skills and participate in the development of the international education environment. This contributes to the preparation of students for work in the global environment.

Enclosed:

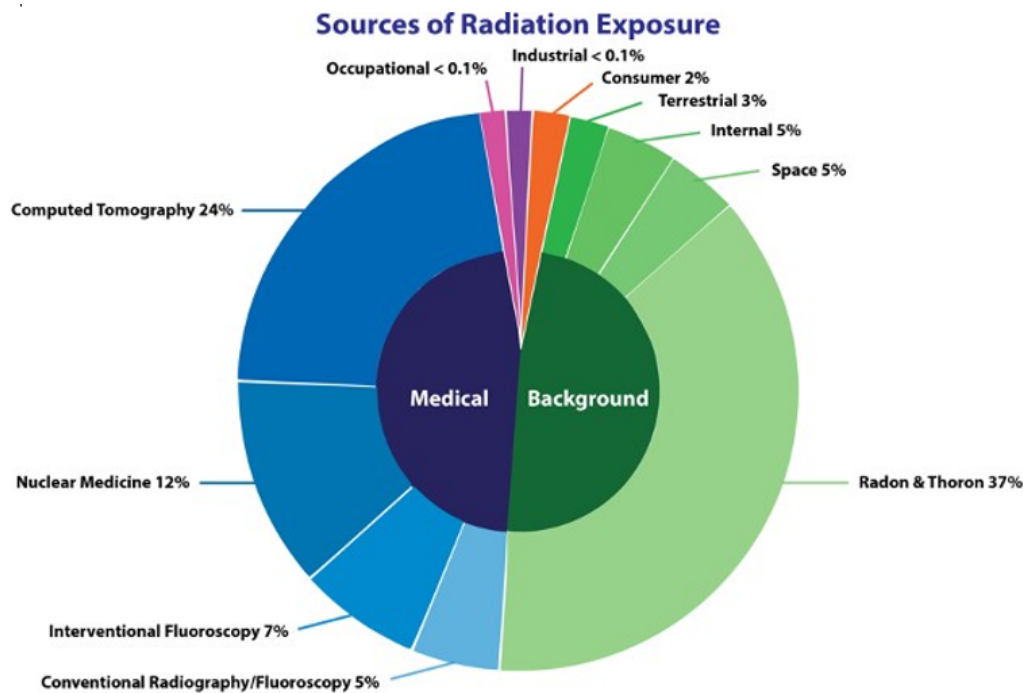
Annex 24.1. Model diploma and supplement thereto.

### **3.1.3. Economic and/ or social substantiation of the study programme, analysis of graduates' employment.**

The study programme educates students by combining studies in two similar fields – medical physics and medical engineering. In medical physics, concepts and methods of physics are used for the prevention, diagnosis and treatment of human diseases to improve human health and well-being. Medical physicists is a health care professional with specific education for the use of the concept of physics in medical equipment and is competent to practice independently in one or more subsectors of medical physics: radiation oncology or radiotherapy, diagnostics and invasive radiology, nuclear medicine and radiation safety. However, medical physicists also work in many other areas that use sophisticated technologies and equipment – audiology, neurology, neurophysiology, cardiology. It is an area of biomedical physics, engineering, which is also a wide area. Medical physics and engineering professionals should be highly qualified, one mistake in the work of these professionals can cause many people's health problems, even death, these professionals need to be highly motivated, responsible practitioners of their profession. Medical physicists are united in the [European Federation of Organisations of Medical Physics \(EFOMP\)](#), the main task of which is to maintain and improve the quality, safety and profitability of health care services when taking patient-oriented measures related to the selection, acceptance, testing, quality assurance, control and optimised clinical use of medical devices with regard to patients' risks and protection against different physical factors, for example, X-rays, electromagnetic field, laser light, radionuclide radiation. There is also the [International Organisation of Medical Physics \(IOMP\)](#), which represents more than 27,000 medical physicists all over the world, as well as two related organisations. The mission of IOMP is to promote practices of medical physicians globally by disseminating scientific and technical information, promoting the education and professional development of medical physicists, as well as higher quality medical services for patients.

These organisations are active in developing the medical physics industry, facilitating the daily work of medical physicists.

In accordance with the Radiation Safety Law and the laws and regulations subordinate thereto, there are approximately 500 medical institutions using medical devices with sources of ionising radiation in Latvia. Radiation monitoring data show that the use of ionising radiation devices is increasing both in diagnosis and treatment. In 2006, only 20% of all radiation exposure was generated by medical equipment, currently it can be said that half of all radiation exposure is represented by radiation produced by medical equipment due to the development of existing and nuclear equipment and methods, which are more widely used in diagnosis and treatment (see Fig. 1). This requires more and more professionals to work with these devices.



#### 1. Radiation exposure sources

(source: NCRP Report No. 160, Ionizing Radiation Exposure of the Population of the United States, link: <https://ncrponline.org/publications/reports/ncrp-report-160-2/>)

There is shortage of medical physics professionals in the world and also in Latvia (<https://likumi.lv/ta/id/297537-specialitates-profesijas-kuras-prognoze-butisku-darbaspeka-trukumu-un-kuras-darba-latvijas-republika-var-uzaicinat-arzemniekus>, available in Latvian only). To improve the situation, EFOMP has developed programme, which could help representatives of different technical specialities to re-qualify into medical physicians.

All graduates of the study programme are employed, and students of the study programme actively involve in the labour market in the last study years. They work in representations of manufacturers of medical devices (Siemens, Philips, GE), in laboratories and companies, whose work is related to medical devices. These professionals are also necessary in public administration, controlling and accreditation institutions.

#### 3.1.4. Statistical data on the students of the respective study programme, the dynamics of the number of the students, and the factors affecting the changes to the number of the students. The analysis shall be broken down into different study forms, types, and languages.

The number of first year students enrolled to the joint RTU-RSU study programme “Medical Engineering and Physics” (students are enrolled in RTU) is higher than the number of graduates of the study programme. There is a small competition for state-funded (budget) places, however, the competition for one state funded study place has reduced compared to previous years. This could be related to the general increase in the number of students enrolled to the programme, as well as the wish of graduates of secondary schools to study in foreign higher education institutions, this could be the impact of the “demographic pitfall”. However, the dynamics in the number of students are stable. Table 2 shows the number of students in the Bachelor’s programme by years (B) as at

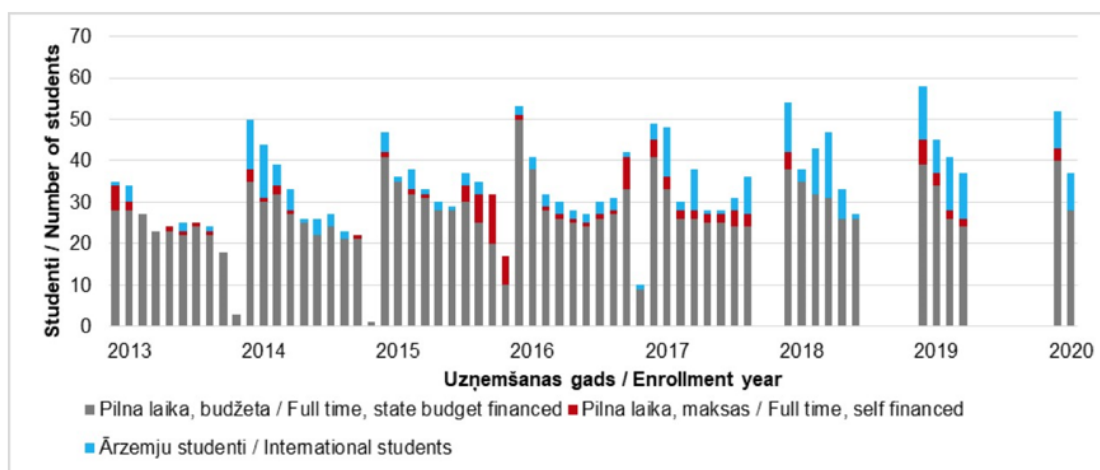
October 1 of every year (data from RTU). The table shows information also about the Master's study programme "Medical Engineering and Physics" (M).

1. Table. Distribution of the number of students by years

Year	Number of students										Total
	year		year		year		year		year		
	B	M	B	M	B	M	B	M	B	M	
2013	31	1	23	3	13	-	13		11		91
2014	25	4	17	2	19		13		11		85
2015	30	-	21	1	16		20		13		100
2016	31		27		15		18		16		107
2017	29	1	29	1	20		11		16		105
2018	29	2	18	1	20		16		12		95
2019	35	3	22	1	15		20		14		106
2020	39	1	29	2	14		17		18		117
2021	39	1	30		14		10		15		108

Approximately 15% of students leave their studies in the first years for various reasons – poor academic achievements, also the fact that students have started working and cannot combine work with studies, that they have chosen their next profession without proper consideration. The number of students expelled varies from year to year, there is no unambiguous trend why students are expelled in the first year of studies. 1-3 students are enrolled each year to the first years studies for a tuition fee, however, since part of the student terminate studies or are expelled in the last years because they fail the curriculum, paid students are offered the opportunity to qualify for a state funded (budget) place and students with strongest knowledge and skills get the place. There is a tendency for students to be expelled in the 4<sup>th</sup> year because they fail the curriculum. Some students find it difficult to prepare and defend a Bachelor's thesis on time. If there are any other unfulfilled requirements, the student is expelled. While some students successfully defend their Bachelor's thesis, they do not have time to prepare engineering projects for defence – in such cases the student is often expelled.

Figure 2 shows student statistics by semesters in both state budget funded study places and paid places, as well as the number of international students by semesters (RTU data).



2. Figure. Student statistics by semesters (RTU data)

The study programme is also offered to international students whose enrolment dynamics have



grown, although the number of students enrolled in the past two years is quite small. International students are admitted to the programme every two years. International students study for a tuition fee. They choose studies in the Bachelor's programme "Medical Engineering and Physics". These students come from different countries – both post-Soviet countries (Uzbekistan, Russia, Azerbaijan) and several Asian countries – Sri Lanka, India (RTU data).

### **3.1.5. Substantiation of the development of the joint study programme and description and evaluation of the choice of partner universities, including information on the development and implementation of the joint study programme (if applicable).**

In accordance with the agreement concluded between Riga Technical University and Riga Technical University on 3 April 2014 "On the implementation of the joint study programme "Medical Engineering and Physics"" (RTU reg. No. 01000-4.1.28 and RSU reg. No. 6.2.-25/2014/0226) and licence No. 04051-168 issued by the Ministry of Education and Science on the right to implement the joint professional Bachelor's study programme "Medical Engineering and Physics" for obtaining a professional Bachelor's degree in medical physics and the qualification of a medical physical technology engineer (decision No. 25 of the Study Programme Licencing Commission meeting of 23 June 2014) since academic year 2014/2015 the professional Bachelor's study programme "Medical Engineering and Physics" is implemented as a joint StP of RSU and RTU. The joint Bachelor's study programme "Medical Engineering and Physics" of RSU and RTU shows that interdisciplinary cooperation between universities in both study and research is an important line of action of RSU.

The joint study programme "Medical Engineering and Physics" dates back to many years ago, when the study courses of the medical block of the RTU's existing study programme were implemented by RSU teaching staff, with contractor's agreements were concluded. During this time, the idea emerged of how to organise studies using RSU equipment, resources – both in anatomy, physiology, and microbiology classes, and how to pay for it. Most of these classes took place only theoretically precisely for that reason. Accordingly, it was one of the practical reasons why the idea emerged to create this study programme as a joint study programme, in which medical study courses are implemented by RSU as a university rich in tradition and experience, which has the necessary theoretical, material and technical base, whereas engineering study courses are implemented by RTU.

Riga Technical University is a modern, internationally known and prestigious university, the only multisectoral technical university in Latvia. RTU has been developing purposefully to become a university of the third generation type, which ensures not only high quality education, but also excellence in research and valorisation – innovation and technology transfer, thus introducing scientific achievements into life.

RSU ensures not only the theoretical base of medical study courses (RSU implements 10% of the total programme offering medicine-related study courses such as "Anatomy", "Physiology", "Cell Biology", "Health Economics", "Basics of Employment Protection and Civil Protection", "Medical Instruments, Equipment and their Application", "Medical Ethics", "Medical Terminology in English"), as well as the engineering technical base – equipment used by the Department of Clinical Skills and Medical Technologies (DCSMT) of the Faculty of Medicine (FM) of RSU – imitated simulated hospital wards with equipment. Students obtain practical experience in work using different equipment also during practical classes in hospitals.

The joint cooperation of RSU and RTU takes place also in organising clinical placement for students, part of students write their final papers related to RSU problems, projects.

The study programme has a joint quality council. Pressing matters are resolved several times a year, also regarding improvement of the content of studies.

Enclosed:

Annex 15. Compliance of the joint study programme with the requirements of the Law on Higher Education Institutions.

## **3.2. The Content of Studies and Implementation Thereof**

**3.2.1. Analysis of the content of the study programme. Assessment of the interrelation between the information included in the study courses/ modules, the intended learning outcomes, the set aims and other indicators with the aims of the study course/ module and the aims and intended outcomes of the study programme. Assessment of the relevance of the content of the study courses/ modules and compliance with the needs of the relevant industry, labour market and with the trends in science on how and whether the content of the study courses/ modules is updated in line with the development trends of the relevant industry, labour market, and science.**

The study programme is structured in such a way as to ensure the logical and sequential acquisition of knowledge, the development of skills and competences, starting with mastering of general study courses, continuing with the industry-specific study courses, which are focused on the creation of new products.

The programme includes study courses which allow the development and education of highly qualified and socially responsible specialists in the field of medical engineering and physics, whose knowledge, skills and competences are appropriate for professional work with equipment, apparatus and instruments for medical use, knowing their design, physical and technical principles of operation, manufacturing technology, conditions of use and safety; with practical work skills for working with equipment to be used in medicine – their purchase, installation, use, tuning and quality management, as well as skills for planning and monitoring radiation technologies, patient and personnel dosimetry.

Medical physicists and medical physical technology engineers should have an idea, general knowledge of human anatomy (i.e. anatomy and tissue structure), its peculiarities, physiology. Thus, the mastering of medical study courses ensured by Rīga Stradiņš University with its teaching staff plays an important role.

After successful mastering of the **health care sector** study courses provided by RSU, the student will be able to integrate individual knowledge and skills into a general idea of the whole human body, use the acquired knowledge and skills to better understand and master specialised study courses. He or she will be able to make informed decisions ensuring the functioning of specialised medical instruments, equipment and systems in clinical medicine. Students will be able to use their

acquired theoretical and practical knowledge by skilfully explaining and demonstrating different anatomical structures and their functions, know how to integrate them individual knowledge and skills into a general idea of a healthy human body, understanding the principles and capabilities of functional diagnostic methods. They will be able to use knowledge of anatomy and physiology to assess human body functioning and its limitations, know the indications for the most important assistive technologies and contraindications for their use to compensate for functional limitations.

Teaching staff continuously identifies latest developments of the sector and follow development trends in the labour market, as well as scientific development trends. Teaching staff with sufficient experience in the field of medical engineering and physics are involved in the implementation of study courses of the study programme.

Since its last accreditation, the content of the study programme has been updated to be up-to-date, complementary, consistent with the aims of the programme and to ensure the achievement of learning outcomes, as well as to meet the standard requirements for a medical physical technology engineer, the latest scientific trends. The content of the study programme was improved in cooperation with people working in the sector for students to acquire comprehensive knowledge in the professional field, know how to use it in practice, as well as be competent to independently analyse information, make decisions and show that they understand professional ethics.

The study process is organised in a way that study and research work topics of students would include pressing matters for the sector. Topics of final papers of students, ideas for realising them come from companies working in the sector – medical institutions, medical equipment service centres.

Table 3. Amount of parts of the study programme in CP

Parts of the study programme	Amount in CP	% of the whole StP
<b>A – compulsory part study courses</b>	<b>118</b>	<b>65.56</b>
A1. General study courses	14	7.78
A2. Basic theoretical courses of the sector and information technology study courses	42	23.34
A3. Professional specialisation study courses of the sector	62	34.45
<b>B – restricted elective study courses</b>	<b>19</b>	<b>10.56</b>
B1. Restricted elective, professional specialisation study courses	11	6.12
specialisation “Medical Equipment”	11	
specialisation “Medical Physics and Nanomedicine”	11	
specialisation “E-Medicine”	11	
specialisation “Medical Electronics”	11	
specialisation “Biomechanics and Assistive Technology”	11	
specialisation “Medical Materials”	11	
specialisation “Medical Engineering Business”	11	
B2. Social and humanities study courses	4	2.23
B6. Languages	4	2.23
<b>C – free elective study courses</b>	<b>6</b>	<b>3.34</b>
<b>D - Placement</b>	<b>25</b>	<b>13.89</b>
<b>E - Final examinations</b>	<b>12</b>	<b>6.67</b>
<b>TOTAL</b>	<b>180</b>	<b>100%</b>

RSU implements nine study courses in the joint professional Bachelor’s study programme “Medical Engineering and Physics” (19 CP / 28.5 ECTS in total).

## **A - compulsory part study courses**

“Health Economics”, 2 CP / 3 ECTS; “Basics of Employment Protection and Civil Protection”, 2 CP / 3 ECTS; “Anatomy”, 2 CP / 3 ECTS; “Physiology”, 2 CP / 3 ECTS; “Cells and Tissue Microstructure”, 2 CP / 3 ECTS; “Medical Instruments, Equipment and Systems, their Application”, 2 CP / 3 ECTS.

## **B - restricted elective, professional specialisation study courses**

“Risks in Business”, 2 CP / 3 ECTS; “Basics of Business Economics and Marketing”, 2 CP / 3 ECTS; “Organisation and Economics of Health Care”, 2 CP / 3 ECTS; “Project Management”, 2 CP / 3 ECTS; “Medical Ethics”, 2 CP / 3 ECTS; “Medical Terminology in English”, 2 CP / 3 ECTS.

## **C - free elective study courses**

“Public Health and Epidemiology”, 3 CP / 4.5 ECTS.

Currently, several part B study courses proposed by RSU (specialisation direction – medical engineering business) are not implemented, namely, the following courses:

- “Risks in Business”;
- “Basics of Business Economics and Marketing”;
- “Organisation and Economics of Health Care”;
- “Project Management”.

These courses can be implemented if they are chosen by at least 8-12 students.

In accordance with applicable legal regulations, the distribution of parts of the study programme was changed, where A (compulsory part) study courses give 118 CP / 177 ECTS, B (restricted elective courses) study courses amount to a total of 19 CP / 28,5 ECTS, where professional specialisation study courses give 11 CP / 16,5 ECTS, humanities and social study courses – 4 CP / 6 ECTS and languages – 4 CP / 6 ECTS. The total volume of placement changed from 26 CP / 39 ECTS to 25 CP / 37.5 ECTS.

A (compulsory part) study courses “Occupational Safety” and “Civil Protection” were merged in one study course “Basics of Employment Protection and Civil Protection” implemented by the Department of Occupational and Environmental Medicine of the Faculty of Medicine of RSU. Also the study course “Economics” implemented by RSU in all study programmes was replaced with a more specialised study course “health Economics” implemented by the Health Management Lecturer Group of the Faculty of Medicine of RSU.

The study course “General Metrology” implemented by RTU was replaced with a more specialised study course “Medical Equipment Technology Measurements”, while the study course “Radiation Safety in Medicine” was replaced with the study course “Radiation and Environmental Safety in Medicine”, in which topics were reviewed including the requirements to the content of study courses defined in the Environmental Protection Law and the Civil Defence Law.

The following study courses were excluded from Part A of the study programme: “Computer Science (Basic Course)” and “Basics of Communication”, but new study courses were added: “Basics of Nanomedicine” and “Medical Instruments, Equipment and Systems, their Application”. The volume of the following Part A study courses was also changed: “Anatomy and Physiology” from 2 CP / 3 ECTS to 4 CP / 6 ECTS; “Design of Medical Equipment” from 3 CP / 4.5 ECTS to 4 CP / 6 ECTS. By merging these three study courses into one, i.e. merging study courses “Medical Instruments, Equipment and Systems” 3 CP / 4.5 ECTS, “Technique for Physiological Measurements” 2 CP / 3 ECTS, “Measurement technique in Medicine” 3 CP / 4.5 ECTS, an extensive study course of 8 CP / 12 ECTS was created, this study course is implemented in two semesters (RTU). RSU consistently implemented the study course “Medical Instruments, Equipment and

Systems, their Application” with the aim to ensure students’ understanding of the possibilities of practical use of measurements and technologies in clinical medicine.

The following specialisation modules with respective specialising study courses of 11 CP / 16.5 ECTS are offered in Part B (restricted elective) of the study programme, if which the specialisation module “Medical Engineering Business” is implemented by RSU:

- **specialisation “Medical Equipment”** with study courses:
  - “Theoretical Mechanics” 2 CP / 3 ECTS,
  - “Strength of Materials” 2 CP / 3 ECTS,
  - “Heat Science” 2 CP / 3 ECTS,
  - “Analysis of Biological Signals” 5 CP / 7.5 ECTS;
- **specialisation “Medical Physics and Nanomedicine”** with study courses:
  - “Technical Mechanics” 4 CP / 6 ECTS,
  - “Nanomedical Technology” 2 CP / 3 ECTS,
  - “Analysis of Biological Signals” 5 CP / 7.5 ECTS;
- **specialisation “E-Medicine”** with study courses:
  - “Technical Mechanics” 2 CP / 3 ECTS,
  - “Image Recognition and Image Processing Methods in Medicine” 3 CP/ 4.5 ECTS,
  - “Computerised Decision-Making in Medicine” 2 CP/ 3 ECTS,
  - “Basics of Artificial Intelligence in Medicine” 2 CP/ 3 ECTS,
  - “Basics of Computer Graphics” 2 CP/ 3 ECTS;
- **specialisation “Medical Electronics”** with study courses:
  - “Technical Mechanics” 2 CP / 3 ECTS,
  - “Analysis of Biological Signals” 5 CP / 7.5 ECTS,
  - “Electronic Elements and Design of Electronic Equipment” 4 CP/ 6 ECTS;
- **specialisation “Biomechanics and Assistive Technology”** with study courses:
  - “Technical Mechanics” 2 CP / 3 ECTS,
  - “Analysis of Biological Signals” 5 CP / 7.5 ECTS,
  - “Assistive Technology” 2 CP / 3 ECTS,
  - “Design of Prostheses” 2 CP/ 3 ECTS;
- **specialisation “Medical Materials”** with study courses:
  - “Technical Mechanics” 2 CP / 3 ECTS,
  - “Biomaterials” 2 CP / 3 ECTS,
  - “Basics of Biomaterial Technology” 3 CP / 4.5 ECTS,
  - “Medical Textiles” 2 CP / 3 ECTS,
  - “Functional Medical Implants” 2 CP/ 3 ECTS;
- **specialisation “Medical Engineering Business”** with study courses
  - “Technical Mechanics” 2 CP / 3 ECTS,
  - “Organisation and Economics of Health Care” 2 CP/ 3 ECTS,
  - “Risks in Business” 3 CP / 4.5 ECTS,
  - “Project Management” 2 CP / 3 ECTS,
  - “Basics of Business Economics and Marketing” 2 CP/ 3 ECTS.

The analysis of the content of the study programme, as well as the information provided above, demonstrates the correlation between the information included in the study courses, the learning outcomes to be achieved, the goals set and other indicators and the aims and achievable learning outcomes of the study programme. The content of study courses is topical and relevant to the needs of the sector and the labour market. Evaluating the compliance of the programme with the scientific trends, it can be concluded that the content of study courses is regularly updated in accordance with the development trends of the sector, the labour market and science.

Enclosed:

Annex 17.1. Compliance of the study programme with the national educational standard.

Annex 18.1. Mapping of the study courses for the achievement of learning outcomes of the study programme.

Annex 18.2. Compliance of the qualification to be acquired upon completion of the study programme with the professional standard.

Annex 19. Planning of the study programme (for each type and form of the implementation of the study programme).

Annex 20. Description of study courses.

**3.2.2. In the case of master's and doctoral study programmes, specify and provide the justification as to whether the degrees are awarded in view of the developments and findings in the field of science or artistic creation. In the case of a doctoral study programme, provide a description of the main research roadmaps and the impact of the study programme on research and other education levels (if applicable).**

Not applicable.

**3.2.3. Assessment of the study programme including the study course/ module implementation methods by indicating what the methods are, and how they contribute to the achievement of the learning outcomes of the study courses and the aims of the study programme. In the case of a joint study programme, or in case the study programme is implemented in a foreign language or in the form of distance learning, describe in detail the methods used to deliver such a study programme. Provide an explanation of how the student-centred principles are taken into account in the implementation of the study process.**

The joint professional Bachelor's study programme is implemented at lectures, practical classes, field trips to companies, as well as in independent studies, learning the basics of medical engineering and physics, their association with other related sectors.

The part of the joint programme implemented by RSU uses different study methods according to the aim and tasks of a specific course. The study courses included in the study programme are student-centred because the different previous knowledge, skills and experience of students are taken into account, thus applying individual types of learning to everyone. Teaching staff works with students in small groups. This makes it possible to use the most appropriate study methods. The study process is organised in such a way that students acquire both theoretical knowledge and practical skills. Different forms of studies are used during the study process: lectures, seminars and discussions, practical classes, individual and group work, individual and group presentations of students. Lectures are organised jointly for several groups of students, while practical classes are held separately for each group of students. The classes are interactive, urging students to discuss various aspects of lecture topics, participate in decision-making and problem-solving.

The aim of the study methods used is to improve students' ability to critically analyse situations and problems using theoretical knowledge, practical skills and attitudes; assess the development of the situation logically and take a decision to resolve the problems; develop communication skills. Various technical means are used in lectures, seminars and practical classes: manikins, models, interactive boards and multimedia projectors, posters and diagrams. For example, in the study course "Anatomy" there is work with study materials, study literature, e-learning environment, internet resources on anatomy, licensed syllabi. In the study course "Cells and Tissue Microstructure", students can strengthen their knowledge and competence independently by working with electron microscopy circuits and histological preparations.

By engaging in the study course "Basics of Employment Protection and Civil Protection", the independent work organisation and tasks of students may also include placement in hospital departments. All study courses included in the study programme are related to the aims and tasks of studies, as well as to the learning outcomes.

The content and volume of examinations corresponds to the content specified in syllabi and the requirements to professional qualification skills and knowledge. All conditions for acquisition of the credit points are described in each study course description.

When starting studies, students receive short information material, which contains the most important information for the student regarding the organisation and practical implementation of studies.

In order to ensure the interaction between the knowledge, competences and skills obtained by graduates, when developing and implementing study courses particular emphasis is given to:

- reflecting current challenges in the content of the study course (at the level of lectures, practical works), the use of modern study methods (specialised software solution, solution-oriented methods, etc.);
- ensure individual approach to students:
- study materials are provided in each study course – both handouts and in the form of electronic materials and presentations;
- each lecturer has a tutorial time, regarding which students are informed when starting the course, as well as the student may apply for individual tutorial in the e-learning system;
- the individual approach is followed in the selection of the methods used – in the selection of individual topics for independent work, study project, as well as Bachelor's thesis;
- there is regular communication with students by e-mail and in the e-learning environment.

Mutual feedback is ensured regularly during the implementation of the study programme. Students receive regular feedback from lecturers about submitted test, course, exam, study projects, reports, placement reports and presentations. At the end of their study course teaching staff conduct a survey on students' satisfaction with the content of the course, their wishes, and listen to proposals. Students implement their participation in the improvement of the study process by expressing their opinion in questionnaires, which are completed for the purpose of assessment of study courses and programmes. The assessment of study courses includes active participation of students in classes, working individually and in groups, participation in discussions, performance of independent work.

When starting a study course, the assessment criteria and methods for the relevant year are presented to students. Learning outcomes are assessed in accordance with Section 15(1) of the Law on Higher Education Institutions and the [RSU Academic Regulations I](#) (in English – [here](#)).

Assessment results are formed in such a way to achieve the learning outcomes of the study course and to provide students with feedback. The implementation of study courses of the RSU part of the

study programme takes place in accordance with the RSU Code of Ethics and Academic Regulations I. Attending classes and taking interim examinations in compulsory, restricted and free elective courses is mandatory. The final assessment in study courses consists of both examination assessments and cumulative assessments regarding participation in practical classes, assessment of students' knowledge and skills during practical classes, practical work protocols, colloquiums, examination. The student has the opportunity to take an examination, course tests twice during an existing session or an extension of a session, and the second examination is assessed by the commission invited by the head of the academic structural unit, unless the examination is in electronic form. If the examination is not passed, it is suggested that the student be exmatriculated after the extension of the session.

**3.2.4. If the study programme envisages an internship, describe the internship opportunities offered to students, provision and work organization, including whether the higher education institution/ college helps students to find an internship place. If the study programme is implemented in a foreign language, provide information on how internship opportunities are provided in a foreign language, including for foreign students. To provide analysis and evaluation of the connection of the tasks set for students during the internship included in the study programme with the learning outcomes of the study programme (if applicable).**

Placement is an integral part of the study programme, and its aim is to improve professional skills and competences of students, as well as to strengthen knowledge in accordance with the requirements included in the profession standard. Placement in the professional Bachelor's study programme "Medical Engineering and Physics" is intended in the amount of 25 CP, its implementation is ensured by RSU. As a result of the placement the study should be prepared for writing an engineering project and a Bachelor's thesis. To gradually achieve this aim and to link theoretical knowledge acquired during studies with real-life challenges, placement is organised in four phases, in accordance with the [general guidelines](#) for placement of the [RTU Institute of Biomedical Engineering and Nanotechnologies](#) (IBEN):

- basic skills acquisition placement (the student acquires basic skills in machining of materials and assembly of electrical/electronic circuits, the placement is planned in year 2, duration of placement – four weeks); placement site: mechanical workshops, Electronic Laboratory of the Institute of Biomedical Engineering and Nanotechnologies; basic skills placement is organised at Riga Technical College, where all students have access to machine tools at the same time;
- clinical placement (the student acquires basic skills for working with diagnostic and therapeutic equipment and systems in a clinic, the placement is planned in years 3-4, the duration of placement is eight weeks); placement site: diagnostic departments of medical institutions, radiation therapy departments of medical institutions;
- scientific research placement (the student acquires basic skills for the development of a research paper, the placement is planned in the 4<sup>th</sup> year of studies, duration of placement – five weeks); placement sites: undertakings or organisations providing opportunities for the development of the research part of the Bachelor's thesis;
- designer's technological placement (the student acquires basic skills in the design and servicing of mechanical, electrical, electronic systems of medical equipment, as well as in the performance and implementation of the relevant technological processes in manufacturing technology, as a result of the implementation of the placement students must choose a topic



for their engineering project, the placement is planned in years 4-5, total duration of placement – eight weeks); placement site: design and manufacturing companies, medical equipment service companies, medical equipment maintenance departments of medical institutions.

The placement is offered by RTU, students can also express their wishes. The opportunities and organisation of the practice for both students in both English and Latvian are the same.

As a partner institution, the RSU promotes, helps to solve problems related to the organisation of clinical practice in English and Latvian students.

Enclosed:

Annex 9. Description of the organisation of placement of the students (RTU's annex).

### **3.2.5. Evaluation and description of the promotion opportunities and the promotion process provided to the students of the doctoral study programme (if applicable).**

Not applicable.

### **3.2.6. Analysis and assessment of the topics of the final theses of the students, their relevance in the respective field, including the labour market, and the marks of the final theses.**

When completing studies, a graduate of the Bachelor's professional higher education study programme must be able to perform professional, innovative and research activities using theoretical foundations and skills, as well as be able to formulate and analytically describe information, problems and solutions. At the end of the programme, students should write a Bachelor's thesis dedicated to a pressing problem in the industry.

Many topics of final papers are related to the problems spotted during clinical placement. About 80% of topics of Bachelor's theses and engineering projects correspond to the challenges proposed by medical physicists, various physicians and clinicians.

Students obtain skills in research work by studying literature and internet resources on a regular basis to successfully develop different study papers, placement reports. Each diploma paper is written for one year. In the first half a year, the student should choose the topic of interest and schedule how much work and time it will take to write each chapter, plan experiments, and so on. To get a passing grade for a diploma paper – a Bachelor's thesis or engineering project – the student must complete two documents: one – justification for the task of the topic of the Bachelor's thesis or engineering project; the second – the work task of the Bachelor's thesis or engineering project, which is approved with his or her signature by both the student and the paper supervisor, advisors and finally – the director of the study programme. When writing a Bachelor's thesis, students should be able to demonstrate the specialised knowledge and skills required for the profession.

The director of the RSU study programme participates in the assessment commission. In the future, it is planned to become more involved in discussing the topics of Bachelor's theses and choosing reviewers, currently it is the responsibility of the director of the RTU study programme.

The Bachelor's theses and engineering projects are publicly defended, and a National Examination Board (NEB) appointed by the RTU Rector is set up for its assessment, which includes two representatives from Rīga Stradiņš University – professionals in the field of medical engineering and physics. After each defence of a Bachelor's thesis, the NEB provides a report, a joint assessment of the Bachelor's theses and engineering projects developed, their quality, their relevance in the sector and the average assessment of students.

The topics of final papers of students are up-to-date, conform to the aims of the programme, ensure achievement of the learning outcome and conform to the needs of the sector. The National Examination Board notes the high quality and feasibility of the work in the professional field. For information on the defended topics of Bachelor's theses and engineering projects see the Annex.

Enclosed:

Annex 22. Topics of final papers of students (RTU's annex).

### **3.3. Resources and Provision of the Study Programme**

**3.3.1. Assessment of the compliance of the resources and provision (study provision, scientific support (if applicable), informative provision (including libraries), material and technical provision, and financial provision) with the conditions for the implementation of the study programme and the learning outcomes to be achieved by providing the respective examples.**

The RSU student portal *MyRSU* contains all the necessary information about studies and the process thereof, as well as different services provided by the university: electronic schedules of classes, e-courses with study materials (e-studies), recordings of video lectures, assessments, application forms, financial information, RSU student's private e-mail and access to *Office365*, self-service printing management, questionnaires about the study course, descriptions of study courses, application for a written statement about the student's status, documents regulating the studies (internal and external regulatory enactments), online databases. The e-learning platform of RSU is used for independent studies, which includes study course descriptions, presentations, tasks, tests, mandatory and recommended readings. The "Library for Students" section of the student portal provides access from any location to the electronic databases.

The RSU Library and its branches provide equipped computer classes and office equipment that can also be used by students of the joint study programme "Medical Engineering and Physics". A registered user may use the offered electronic resources (subscribed databases) outside the library premises, as well as receive individual passwords that allow the use of library resources from home or workplace. There are also opportunities to receive consultations by applying in advance and agreeing on the time of consultation. The RSU Library also provides support to students with disabilities. The Library has an electronic reader of electronic editions *BRUNO*, which makes printed

publications available in audio format, storing educational materials in audio format, and listening for visitors with impaired vision, language development problems, or dyslexia.

Study premises of Rīga Stradiņš University are modern, equipped with equipment appropriate to the study process. To ensure specific needs of each study course, the material base is located in departments and scientific institutes of RSU.

The RSU Medical Education Technology Centre (METC) offers a new and innovative approach to medical education as part of the “Simulated hospital” project. This project also provides the technical base and necessary materials for the implementation of classes of the study course “Medical Instruments, Equipment and Systems, their Application”. The course aims to develop students’ knowledge and understanding of the practical use of medical instruments, devices and systems in clinical medicine. In the METC “Simulated hospital” environment, students of the programme “Medical Engineering and Physics” master the modern technologies behind simulation-based medical education during practical classes (i.e. modern manikins, simulated environment elements, debriefing systems, etc.).

As regards RTU and the provision of resources in the study programme “Medical Engineering and Physics”, the Institute of Biomedical Engineering and Nanotechnology has:

- the only laboratory of medical diagnostic equipment in the north-western region of Europe equipped with the widest range of equipment;
- laboratory for characterising materials and nanoobjects, including threshold photoelectron and exoelectron spectroscopy, infrared and FTIR spectroscopy, FTIR ATR spectroscopy surface analysis; XPS, AES, SIMS spectroscopy; AFM, STEM and optical microscopy; micro and nano indentation methods;
- radiation dosimetry apparatus;
- apparatus for evaluating the quality and safety of medical diagnostic equipment;
- apparatus for measuring bioelectric signals for analysis;
- biochip laboratory;
- powder materials laboratory;
- machine tools and 3D printing equipment for prototyping;
- electronic components and instruments for the assembly and testing of electronic devices;
- other equipment.

To ensure industry-specific professional specialisation study courses, the material base is located in RTU institutes and departments. For placement, writing a Bachelor’s thesis and an engineering project students also use the material and technical base, which is located at the place of development of the paper or project (companies, scientific laboratories, health care system institutions – hospitals, etc.). Study aids are digitalised and study films are created demonstrating the fulfilment of laboratory work. The *Moodle* environment (*ORTUS* interface), [rtu.lv](http://rtu.lv), [bini.rtu.lv](http://bini.rtu.lv) are widely used. There are ramps and elevators for students with movement disorders.

Enclosed:

Annex 23.2. Assessment of the informative and methodological provision regarding library resources for the implementation of the Faculty of Medicine study programmes in accordance with the requirements of the guidelines.

Annex 23.3. Assessment of the information and methodological base on IT resources.

**3.3.2. Assessment of the study provision and scientific base support, including the resources provided within the framework of cooperation with other science institutes and higher education institutions (applicable to doctoral study programmes) (if applicable).**

Not applicable.

**3.3.3. Indicate data on the available funding for the corresponding study programme, its funding sources and their use for the development of the study programme. Provide information on the costs per one student within this study programme, indicating the items included in the cost calculation and the percentage distribution of funding between the specified items. The minimum number of students in the study programme in order to ensure the profitability of the study programme (indicating separately the information on each language, type and form of the study programme implementation).**

The professional Bachelor's study programme "Medical Engineering and Physics" Latvian language stream, in RSU is currently profitable and the programme's profitability can be ensured at the minimum number of students in the programme, which is 21 students. 97 students are currently studying in the program.

Professional Bachelor's study program "Medical Engineering and Physics" English Language stream is not profitable currently and its profitability at the existing revenues from 1 KP can be achieved with a minimum student population of 29 students. Currently, 20 students are studying in the program. However, in order for the study programme to cover implementation and development costs, it is planned to increase the revenue from 1 KP to EUR 154.55 by reviewing study fees.

**Professional Bachelor's study programme "Medical Engineering and Physics" Latvian language stream**

The StP is implemented in cooperation with RTU. The StP is financed from state budget funds and private and legal entities. The planned revenue from 1 CP is EUR 142.15 per student, part of which RSU receives from the state budget, the rest is mutually settled with RTU. Payments from natural or legal persons related to the implementation of the StP are received by RTU. RTU calculates the distribution of the fees received, according to which mutual settlements are made. The average number of students in the study course is 25 students.

The funding is used for staff remuneration, recruitment of guest lecturers, taxes, maintenance of IT infrastructure, purchase of equipment and facilities and study visit expenses. In addition to the direct costs of delivering lectures and classes, the StP has to cover the costs of maintaining the infrastructure (premises, IT solutions) and costs of other common RSU resources used by the StP (Student Services, Library, organisation of the study process, grant to the Student Union and other support and administrative functions).

The StP is implemented by RSU Department of Humanities, Language Centre, Department of Morphology, Department of Occupational and Environmental Medicine, Department of Human Physiology and Biochemistry, Department of Rehabilitation, Health Management Lecturer Group, Department of Clinical Skills and Medical Technologies

#### Information about student costs

Name	Outcome with current tuition fees
Average revenue per 1 CP, EUR	142.15
Average costs per 1 CP, EUR	113.17
Academic staff, %	56
Department resources, %	2
Other direct costs, %	4
Fixed costs, %	3
Overheads, %	35

#### Information on RSU revenue and expenditure per student:

Name	Outcome with current tuition fees
Average revenue per 1 CP, EUR	697
Average costs per 1 CP, EUR	555
Academic staff, %	56
Department resources, %	2
Other direct costs, %	4
Fixed costs, %	3
Overheads, %	35

#### **Professional Bachelor's Degree Programme “Medical Engineering and Physics” English language stream**

The StP is implemented in cooperation with RTU. The StP is funded by private and legal entities. Payments from natural or legal persons related to the implementation of the StP are received by RTU. RTU calculates the distribution of the fees received, according to which mutual settlements are made. The planned revenue of 1 CP is EUR 111.3, which RSU receives from RTU, the lead partner of the StP. The revenue from 1 CP does not cover the costs of implementing the programme. In order to cover the implementation and development costs of the StP, the revenue

from 1 CP is planned to be increased to EUR 154.55. The average number of students in the study course is 20 students.

The funding is used for staff remuneration, recruitment of guest lecturers, taxes, maintenance of IT infrastructure, purchase of equipment and facilities and study visit expenses. In addition to the direct costs of delivering lectures and classes, the StP has to cover the costs of maintaining the infrastructure (premises, IT solutions) and costs of other common RSU resources used by the StP (Student Services, Library, organisation of the study process, grant to the Student Union and other support and administrative functions).

The StP is implemented by RSU Language Centre, Department of Morphology, Department of Occupational and Environmental Medicine, Department of Human Physiology and Biochemistry, Health Management Lecturer Group, Department of Clinical Skills and Medical Technologies, Department of Rehabilitation

### Information about student costs

Name	Outcome with current tuition fees
Average revenue per 1 CP, EUR	111.3
Average costs per 1 CP, EUR	136.0
Academic staff, %	67
Department resources, %	3
Other direct costs, %	2
Fixed costs, %	5
Overheads, %	23

### Information on RSU revenue and expenditure per student:

Name	Outcome with current tuition fees
Average revenue per 1 CP, EUR	1113
Average costs per 1 CP, EUR	1360
Academic staff, %	67
Department resources, %	3
Other direct costs, %	2

Fixed costs, %	5
Overheads, %	23

### 3.4. Teaching Staff

**3.4.1. Assessment of the compliance of the qualification of the teaching staff members (academic staff members, visiting professors, visiting associate professors, visiting docents, visiting lecturers, and visiting assistants) involved in the implementation of the study programme with the conditions for the implementation of the study programme and the provisions set out in the respective regulatory enactments. Provide information on how the qualification of the teaching staff members contributes to the achievement of the learning outcomes.**

The qualification of teaching staff involved in the implementation of the study programme corresponds to the conditions of implementation of the study programme and the requirements of regulatory enactments, and ensures the achievement of aims and learning outcomes of the study programme and respective study courses. The teaching staff involved in the study programme are professors, associate professors, assistant professors, lecturers of RSU departments and assistants from different RSU structural units:

- [Language Centre](#), in English – [here](#);
- [Department of Morphology](#), in English – [here](#);
- [Department of Public Health and Epidemiology](#), in English – [here](#);
- [Department of Humanities](#), in English – [here](#);
- [Department of Human Physiology and Biochemistry](#), in English – [here](#);
- [Department of Occupational and Environmental Medicine](#), in English – [here](#);
- [Health Management Lecturer Group](#), in English – [here](#);
- [Department of Clinical Skills and Medical Technologies](#), in English – [here](#).

The teaching staff involved in teaching of study courses of the study programme “Medical Engineering and Physics” are highly qualified professionals in the field, who are actively involved in scientific work. In 2020, the *ZDIS Pure* system: <https://science.rsu.lv/> has been introduced in Rīga Stradiņš University to show all scientific results and achievements of teaching staff.

The study course “Medical Terminology in English” is taught by lecturer **Miervaldis Karulis**, a teacher at RSU Language Centre since 2012. The lecturer is currently a doctoral student in the doctoral study programme “Sociology” at RSU, before that he obtained a doctoral degree in the study programme “Education Management” at the University of Latvia. He conducted one of his latest studies at the end of 2020 in the context of the Covid-19 pandemic, which posed a huge challenge to higher education: distance learning became an alternative way which had to be accepted. The aim of the study was to clarify the opinions of resident and non-resident students on the benefits and shortcomings of digital studies in the context of the pandemic (*Comparative evaluation of the digital study environment*, Miervaldis Karulis, 2021).

The study course “Cell and Tissue Microstructure” is taught by Professor **Valērija Groma** and

Assistant Professor **Sandra Skuja**. Valērija Groma has been a professor at the Department of Morphology of the Faculty of Medicine since 2017, she is also the head of the laboratory and the lead researcher at the Institute of Anatomy and Anthropology, Joint Laboratory of Electron Microscopy. Assistant Professor Sandra Skuja is currently the lead researcher at the Institute of Anatomy and Anthropology, Joint Laboratory of Electron Microscopy, as well as assistant professor at the Department of Morphology of the Faculty of Medicine.

Professor of the Department of Occupational and Environmental Medicine **Ivars Vanadziņš** is the head of the study course “Public Health and Epidemiology: and the director and lead researcher of the RSU Institute of Occupational Safety and Environmental Health, as well as expert at the Ministry of Health and the Ministry of Welfare, and at the Latvian Council of Science.

The study course “Anatomy” is taught by Associate Professor **Dzintra Kažoka**, Professor **Aivars Vētra** and Assistant Professor **Silvija Umbraško**. In 2022, Dzintra Kažoka, in cooperation with RTU participated in the preparation and publication of the scientific article on different techniques for creating digital 3D models of bones made of natural samples (*Edelmers, E., Kažoka, D., Boločko, K., Pilmane, M. Different Techniques of Creating Bone Digital 3D Models from Natural Specimens. Applied System Innovation, 2022, Vol. 5, No. 4, Article number 85. ISSN 2571-5577. Available at: doi:10.3390/asi5040085*).

The lecturer of the study course “Physiology” **Gita Gersone** is an assistant professor at the Department of Human Physiology and Biochemistry of the Faculty of Medicine of RSU. She developed the study course “Physiology for Medical Engineers” (for the foreign flow).

Lecturer **Alina Dūdele** has a Master's degree in Public Health majoring in Health Management, she is currently a lecturer of the Health Management Lecturer Group of the RSU Faculty of Public Health and Social Welfare. Her academic and research activity covers health care management, health economics, health policy, value-based health care. Alina Dūdele reads study courses “Health Economics” and “Basics of Finance Management” of the Rīga Stradiņš University Master's programme “Health Management”. Alina Dūdele graduated from the doctoral study programme “Medicine” at Rīga Stradiņš University. She is involved in international research projects of the health care system, including in the network *European Observatory on Health Systems and Policies Health Systems and Policy Monitor (HSPM)*. Alina Dūdele participates in health care system development projects in the state and private sector as experts.

The study course “Medical Instruments, Equipment and Systems, their Application” **Oļegs Sabeļņikovs**, acting assistant **Jekaterina Jagodzinska-Peškova**, acting assistant **Marina Šarkele** and lecturer **Olga Jegorova**.

**Oļegs Sabeļņikovs** is the director of the RSU part of the study programme “Medical Engineering and Physics”. Associate professor at the Department of Anaesthesiology and Intensive Care of the Faculty of Medicine of RSU. He is the acting head of the Department of Clinical Skills and Medical Technologies of the Faculty of Medicine of RSU, deputy health of the Clinic of Anaesthesiology, Intensive Care of VSIA Pauls Stradiņš Clinical University Hospital.

Acting Assistant **Jekaterina Jagodzinska-Peškova** is the head physician of ECMO, physician, anaesthesiologist, resuscitator (expert). She performs professional activity at the Clinic of Intensive Care of the Department of Toxicology and Sepsis, RAKUS. Acts in different international organisations: *ESICM (European society of intensive care)*, *ESAIC (European Society of Anaesthesiology and Intensive Care)* and LARA (Latvian Association of Anaesthesiology and Intensive Care).

Lecturer **Olga Jegorova** is a surgeon at PSCUH, certified physician, transplantologist at Pauls Stradins Clinical University Hospital.



From 1 January 2017 to 1 October 2022, 19 lecturers of the Bachelor's study programme "Medical Engineering and Physics" participated in continuing education activities of the Centre for Educational Growth attending more than 110 training activities of different content. The lecturers of the study programme "Medical Engineering and Physics" spent 2585 academic hours on mastering continuing education activities.

The lecturers participated in the following activities: Creation of animated visual studio materials; Reference management tool *EndNote*; Remote work of student groups with the *Miro* tool; Open access to scientific information; *Collaboration and Partnership Towards Professional and Sectoral Development: Local, National, Transnational*; *Contextualizing the use of Webinar in Higher Education*; *Creating Engaging and Interactive Classrooms through Active Learning Techniques*; Possibilities and comparison of *Web of Science* and *Scopus* databases; Digital Darwinism – what it means for us each and our institution; Think tank: Feedback as a sources of cognition and possibility to improve oneself; Creation of electronic tests; Drafting of interactive study materials (*H5P*); Interactive presentations and real-time feedback in the *Mentimeter* tool; The potential of immersive technologies for effective learning strategies; How games activate teaching and learning; How to promote the acquisition of transversal skills relevant to the working environment in the study process; How to create effective image and text compositions in teaching materials; Potential of conflict for building cooperation; Research methodology and statistical processing of data; Mediation – wilful and responsible conflict resolution culture at a university; Visualization of content in presentations; Technology-enriched study process; Creating videos: complex in a simple and short way and many other.

Enclosed:

Annex 24.7. Analysis of the composition of the teaching staff.

#### **3.4.2. Analysis and assessment of the changes to the composition of the teaching staff over the reporting period and their impact on the study quality.**

During the accreditation period, there have been no significant changes in the composition of heads of study courses. Lecturers involved in study courses changes, but academic and professional growth of lecturers should be noted.

In 2019, the director of the RSU part of the study programme "Medical Engineering and Physics" and the head of the study course "Medical Instruments, Equipment and Systems, their Application" Associate Professor Oļegs Sabeļņikovs was elected as an Associate Professor of the RSU Faculty of Medicine (Department of Anaesthesiology and Intensive Care).

Since 2019, the head of the study course "Anatomy" Dzintra Kažoka has been elected as an Associate Professor of the RSU Department of Morphology.

In 2018, the lecturer of the study course "Physiology" graduated from a doctoral study programme and obtained a doctoral degree in biology at the Faculty of Biology of the University of Latvia. In 2019, acting lecturer Laura Isajeva started studies in the sub-programme "Medicine": of the doctoral study programme "Health Care" at Rīga Stradiņš University.

Since 2017, the head of the study course "Cell and Tissue Microstructure" Valērija Groma has been elected as a Professor of the Department of Morphology of the Institute of Anatomy and

Anthropology of the Faculty of Medicine. Valērija Groma and the heads of study courses and teaching staff involved in the implementation of the study programme are involved in preparing and updating study programmes, preparing scientific publications. They participate in scientific conferences in Latvia and abroad, perform functions of experts, create summarised of scientific literature and information on research in professional research areas, supervisor doctoral research projects, participate in the implementation and leading of fundamental and applied research projects and national research programmes.

Further training and professional development of doctors can be seen as a positive influence on the study process and quality.

**3.4.3. Information on the number of the scientific publications of the academic staff members, involved in the implementation of doctoral study programme, as published during the reporting period by listing the most significant publications published in Scopus or WoS CC indexed journals. As for the social sciences, humanitarian sciences, and the science of art, the scientific publications published in ERIH+ indexed journals or peer-reviewed monographs may be additionally specified. Information on the teaching staff included in the database of experts of the Latvian Council of Science in the relevant field of science (total number, name of the lecturer, field of science in which the teaching staff has the status of an expert and expiration date of the Latvian Council of Science expert) (if applicable).**

Not applicable.

**3.4.4. Information on the participation of the academic staff, involved in the implementation of the doctoral study programme, in scientific projects as project managers or prime contractors/ subproject managers/ leading researchers by specifying the name of the relevant project, as well as the source and the amount of the funding. Provide information on the reporting period (if applicable).**

Not applicable.

**3.4.5. Assessment of the cooperation between the teaching staff members by specifying the mechanisms used to promote the cooperation and ensure the interrelation between the study programme and study courses/ modules. Specify also the proportion of the number of the students and the teaching staff within the study programme (at the moment of the submission of the Self-Assessment Report).**

Cooperation between teaching staff members takes place as follows:

- participating in the joint discussion of existing and new and updatable courses/modules;
- regular discussions of the directors of the RTU-RSU programme;

- study course observation visits discussed at department meetings.

The following mechanism is in place to facilitate cooperation: The directors of the RTU-RSU programme have discussions by inviting the parties involved in the subjects to be discussed, including the RTU/RSU administration, other structural units, as well as in joint meetings of the Study Quality Council.

Around 100 teaching staff members are involved in the study process annually, teaching approximately 160 students (1.6 students/1 teacher) (RTU data).

# Annexes

III - Description of the Study Programme - 3.1. Indicators Describing the Study Programme		
Sample of the diploma and its supplement to be issued for completing the study programme	24.1_AnxDiploma and supplement_Joint StP_Med_Eng_Phy_RTU data.pdf	24.1_pielik_Diploms un pielikums_Kopiga StP_Med_inz_fiz_RTU dati.pdf
For academic study programmes - Opinion of the Council of Higher Education in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions (if applicable)		
Compliance of the joint study programme with the provisions of the Law on Higher Education Institutions (table) (if applicable)	15_AnxCongformity_Joint StP_with_requirements_Med_Eng_Phy.pdf	15_pielik_Kopigas StP_atbilstiba_prasibam_Med_inz_fiz.pdf
Statistics on the students in the reporting period	16_Anx_Student statistics_Med_Eng_Phy_RTU data.pdf	16_pielik_Studejoso statistika_Med_inz_fiz_RTU dati.pdf
III - Description of the Study Programme - 3.2. The Content of Studies and Implementation Thereof		
Compliance with the study programme with the State Education Standard	17.1_AnxCmpl_with_Nat_Ed_Standard_Med_Eng_Phy.pdf	17.1_pielik_Atbalst_valsts_izgl_stand_Med_inz_fiz.pdf
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard or the requirements for professional qualification (if applicable)	18.2_AnxCmplance_w_profession_stand_Joint StP_Med_Eng_Phy_RSU courses conv.pdf	18.2_pielik_Kopigas StP_Med_inz_fiz_profesijas_standarta_kartejums_RSU istenotie studiju kursi.pdf
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)		
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	18.1_Anx_St_course_mapping_achieve_learn_outc_Med_Eng_Phy.pdf	18.1_pielik_Stud_kursu_kartejums_stud_rezult_sasniesanai_Med_inz_fiz.pdf
The curriculum of the study programme (for each type and form of the implementation of the study programme)	19_pielik_Studiju programmas planojums_MIF_19_AnX_Plan for full-time studies_MEP.pdf	19_pielik_Studiju programmas planojums_MIF_19_AnX_Plan for full-time studies_MEP.pdf
Descriptions of the study courses/ modules	20_Anx_Study_course_description_Med_Engineering_Physics.pdf	20_pielik_Kursu_apr_Med_inzenierija_fizika.pdf
Description of the organisation of the internship of the students (if applicable)		
III - Description of the Study Programme - 3.4. Teaching Staff		
Confirmation that the academic staff of the doctoral study programme includes not less than five doctors, of which at least three are experts approved by the Latvian Council of Science in the branch or sub-branch of science in which the study programme intends to award a scientific degree (if applicable)		
Confirmation that the academic staff of the academic study programme complies with the requirements specified in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions (if applicable)		

# Art Therapy (47722)

Study field	<i>Health Care</i>
ProcedureStudyProgram.Name	<i>Art Therapy</i>
Education classification code	<i>47722</i>
Type of the study programme	<i>Professional master study programme</i>
Name of the study programme director	<i>Jana</i>
Surname of the study programme director	<i>Duhovska</i>
E-mail of the study programme director	<i>jana.duhovska@rsu.lv</i>
Title of the study programme director	<i>Mg.art., Mg.sc.sal., candidate for a degree</i>
Phone of the study programme director	
Goal of the study programme	<i>To provide the opportunity to obtain a Master's degree in health care and acquire professional education in art therapy, according to the chosen specialisation, in accordance with the standard for professional higher education and the professional standard of art therapist, forming the basis for further professional activity in the field of health and social care and subsequent certification.</i>
Tasks of the study programme	<p><i>To provide students with the opportunity of acquiring professional knowledge, skills and competence in art therapy in their chosen specialisation, preparing specialists who are able to adequately understand and effectively solve professional tasks, successfully cooperate with other specialists, integrating into a multiprofessional or interdisciplinary team;</i></p> <p><i>To deepen students' knowledge, skills and competence in research work, improving their ability to develop and implement research projects in art therapy and to present them;</i></p> <p><i>To promote high ethical standards in professional activities and motivation for professional development and self-improvement by developing enterprise, initiative, and responsibility for maintaining and improving one's qualifications.</i></p>

Results of the study programme	<p>1. The student is able to describe and explain medical, social science (psychological) and artistic concepts relevant to the professional practice of art therapy in the chosen specialisation.</p> <p>2. Explains, compares and evaluates the history of the development of art therapy in the chosen specialisation and the latest achievements in the context of health and social care.</p> <p>3. According to the specific situation and needs of the client/patient, working independently or as part of a multiprofessional or interdisciplinary team, is able to apply the medical technology of art therapy, including - to perform a client/patient assessment, develop and implement an art therapy plan according to the specialisation individually or in a group and apply practice based on the latest findings in the field and evidence, using new approaches where appropriate.</p> <p>4. The student is able to plan and conduct research appropriate to the basic principles of research and to the current developments of the profession, and to summarise and present the results in a reasoned manner, thereby contributing to the creation of new knowledge and the development of research or professional methods.</p> <p>5. Able to evaluate and analyse the effectiveness of the use of art therapy according to the specialisation in strengthening and improving the health of clients/patients and justify the decisions made.</p> <p>6. Able to independently drive the improvement of one's competences and further learning.</p> <p>7. Can independently formulate and critically analyse professional problems, explain and discuss art therapy in a reasoned manner with both professionals and lay people.</p> <p>8. The student is able to implement in practice ethical responsibility, understanding potential impact of one's activities on an individual, group and society.</p>
Final examination upon the completion of the study programme	<p>National (qualification) examination.</p> <p>Defence of Master's thesis.</p>

## Study programme forms

### Full time studies - 2 years, 6 months - latvian

Study type and form	Full time studies
Duration in full years	2
Duration in month	6
Language	latvian
Amount (CP)	100

Admission requirements (in English)	<i>Bachelor's degree or second-level professional higher education in a state accredited study programme in the following subject areas: arts, humanities, social and human sciences, health care, social welfare, teacher education and educational sciences (or equivalent higher education). Applicants without a Bachelor's degree or a second level of professional higher education in health care must present a document confirming completion of RSU preparatory course for the Master's programme in Art Therapy. Entrance examination</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	<i>Professional Master's Degree in Health Care</i>
Qualification to be obtained (in english)	<i>Qualification of an art therapist specialising in visual and plastic arts therapy or dance and movement therapy, or music therapy, or drama therapy</i>

### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

### 3.1. Indicators Describing the Study Programme

**3.1.1. Description and analysis of changes in the parameters of the study programme made since the issuance of the previous accreditation form of the study field or issuance of the study programme license, if the study programme is not included on the accreditation form of the study field, including changes planned within the evaluation procedure of the study field evaluation procedure.**

The changes implemented in the study programme during the reporting period affect the admission conditions:

1) since the academic year 2017/2018, for applicants without a Bachelor's degree or second-level higher education in health care or health sciences, an additional compulsory admission requirement of knowledge in core biomedical subjects relevant for a functional specialist, which provides a basis for further studies in a programme of the health care direction, has been introduced;

2) since the academic year 2017/2018, points are awarded for the applicant's documented prior experience in art therapy and/or psychotherapy and/or art therapy-related training (conference, seminar, masterclass).

*Table 1. Changes in the StP Parameters*

No.	Parameter	Description and analysis of changes in the StP parameters during the accreditation period	Planned changes within the assessment procedure
1.	Study direction	—	—
2.	Title of the StP	—	—
3.	Code according to the Latvian Education Classification	—	—
4.	Head of the StP	—	—



No.	Parameter	Description and analysis of changes in the StP parameters during the accreditation period	Planned changes within the assessment procedure
5.	Scientific degree of the StP director	<i>Mg. art., Mg. sc. sal.</i> Jana Duhovska, director of the study programme, graduated from RSU doctoral study programme "Medicine" in 2020, obtaining the status of a candidate for scientific degree. Doctoral thesis development is still ongoing	—
6.	Objective of the StP	—	—
7.	Tasks of the StP	—	—
8.	Learning outcomes to be achieved	—	—
9.	Final examination upon the completion of the StP	—	—
10.	Type and form of studies	—	—
11.	Duration of implementation	—	—
12.	Language of implementation	—	—
13.	Volume of the StP (CP)	—	—

No.	Parameter	Description and analysis of changes in the StP parameters during the accreditation period	Planned changes within the assessment procedure
14.	Admission requirements	<p>Changes from the 2017/2018 academic year:</p> <p>1) A bachelor's degree or second level higher education in health care or health science, or compulsory acquisition of knowledge corresponding to the functional specialist in basic biomedical subjects (training courses of the RSU faculty of continuing education for studies programme "Art therapy" or RSU Open University);</p> <p>(2) entrance examination and applicant's documented prior experience in art therapy and/or psychotherapy and/or arts therapy-related training (conference, seminar, masterclass)</p>	—
15.	Degree to be awarded	—	—
16.	Qualification to be awarded	—	—
17.	Place of implementation	—	—

Table 1 shows that the admission rules have changed in the StP during the reporting period (see Paragraph 14).

**3.1.2. Analysis and assessment of the study programme compliance with the study field. Analysis of the interrelation between the code of the study programme, the degree, professional qualification/professional qualification requirements or the degree and professional qualification to be acquired, the aims, objectives, learning outcomes, and the admission requirements. Description of the duration and scope of the implementation of the study programme (including different options of the study programme implementation) and evaluation of its usefulness.**

The professional Master's study programme "Art Therapy" of the Health Care study direction at Rīga Stradiņš University has been implemented since 2006.

The objective of the study programme is to provide the opportunity to obtain a Master's degree in health care and acquire professional education in art therapy, according to the chosen specialisation in accordance with the standard for professional higher education and the professional standard of art therapist, forming the basis for further professional activity in the field of health and social care and subsequent certification.

Programme code 47722 describes the professional master's programme in Health Care, where the first part of code "47" refers to second level professional higher education – professional master's degree, while the second part of code "722" – group of educational programmes: Health and social welfare and a set of educational programmes: Healthcare. Compliance is recognizable.

The main tasks of the study programme:

- 1) to provide students with the opportunity of acquiring professional knowledge, skills and competence in art therapy in their chosen specialisation, preparing specialists who are able to adequately understand and effectively solve professional tasks, successfully cooperate with other specialists, integrating into the work of a multiprofessional or interdisciplinary team;
- 2) to deepen students' knowledge, skills and competence in research work, improving their ability to develop and implement research projects in art therapy and to present them;
- 3) to promote high ethical standards in professional activities and motivation for professional development and self-improvement by developing enterprise skills, initiative, and responsibility for maintaining and improving one's qualifications.

The study programme outcomes correspond to the knowledge, skills and competences described in the Latvian professional standard for art therapists. They are formulated in accordance with the learning outcomes for studies of Level 7 of the European Qualifications Framework, and in line with the recommendations and guidelines developed by the European Consortium for Arts Therapies Education[1] and professional organisations such as the European Music Therapy Confederation[2], the European Association of Dance Movement Therapy[3], the European Federation of Art Therapy[4], and the European Federation of Drama Therapy[5].

The achievability of the objectives and tasks of the study programme is determined by the content and organisation of the study programme, while the verifiability is reflected in the following learning outcomes:

- 1) the student is able to describe and explain concepts of medicine, social sciences (psychology) and art relevant to the professional practice of art therapy in the chosen specialisation;
- 2) explains, compares and evaluates the history of the development of art therapy in the chosen specialisation and the latest achievements in the context of health and social care;
- 3) according to the specific situation and needs of the customer/patient, working independently or as part of a multiprofessional or interdisciplinary team, is able to use the medical technology of art therapy, including performing a customer/patient assessment, develop and implement an art therapy plan according to the specialisation individually or in a group and apply practice based on the latest findings in the field and evidence, using new approaches where required;
- 4) the student is able to plan and conduct research appropriate to the basic principles of research and to the current developments of the profession, and to summarise and present the results in a reasoned manner, thereby contributing to the creation of new knowledge and the development of research or professional methods;
- 5) able to evaluate and analyse the effectiveness of the use of art therapy according to the specialisation in strengthening and improving the health of customers/patients and justify the decisions made;
- 6) able to independently drive the improvement of one's competences and further learning;
- 7) able to independently formulate and critically analyse professional problems, explain and discuss art therapy in a reasoned manner with both professionals and lay people;
- 8) able to implement in practice ethical responsibility, understanding the potential impact of one's activities on an individual, group and society.

The name, degree to be obtained and professional qualification, aims, tasks, learning outcomes and admission requirements of the study programme are mutually relevant. The structure and content of the study programme allows implementation of the aims and tasks of the study programme, as well as achievement of the learning outcomes provided for in the study programme and preparation of alumni for the performance of such professional tasks, which are determined by the standard of the profession of art therapist.

Enrolment in the programme takes place in accordance with the RSU Admission Regulations approved by the RSU Senate. Upon successful completion of the admission examinations, the Art Therapy study programme, through a competition, admits applicants with a Bachelor's degree or a second-level professional higher education in a state-accredited study programme in the following subject areas: arts, humanities, social and behavioural sciences, health care, social welfare, teacher education and educational sciences.

Applicants without previous higher education (Bachelor's degree or second-level professional higher education) in health care, health science or medicine must present a document certifying that the applicant has successfully passed preparatory courses for studies in RSU study programme "Art Therapy".

Admission examinations consist of the following:

- 1) professional skills test in the specialisation (40% of the assessment);
- 2) an interview on motivation for studies, previous experience in art therapy, planned professional activity after graduation, research interests for the planned Master's thesis, as well as resources and possible difficulties in the study process (40% of the assessment);
- 3) applicant's experience in art therapy and/or psychotherapy, or in educational activities related to

art therapy – attendance of a conference, seminar, masterclass (20% of the assessment).

The study programme in the volume of 100 CP / 150 ECTS is implemented in a full-time format (5 semesters), which requires 40 academic hours of work per week. Lectures and face-to-face classes are held on Fridays and Saturdays, with an average of 16 contact hours per week. A significant part of the studies (on average 24 hours per week) consists of students' independent work individually and in teams, including the consolidation of lecture materials, systematic reading of specified sources, written assignments, independent preparation for practical classes, etc. The duration and volume of the study programme conforms to the requirements specified in the regulatory enactments of the Republic of Latvia (Standard for the profession of Art therapist, Chapter VII A of the medical treatment Law, Cabinet Regulation No. 268) for the acquisition of full-time second level professional higher education.

Since state-funded study places have become available in the programme (10 in the academic year 2022/2023) and with the increasing recognition of the profession, there is a great demand for studies in the programme, which is indicated by the competition – 4-6 applicants per state-funded place (the number depends on art therapy specialisation). Students of the programme most often have a previously acquired Bachelor's or Master's degree in one of the fields defined in the admission requirements, as well as significant professional experience, which provides both a good foundation for Art Therapy study programme and a successful, complementary synergy with the previous experience of other students.

In order to ensure that students with prior education in non-healthcare areas have the necessary amount of knowledge to acquire the profession of art therapist (as a functional specialist) in subjects of the medical base, since 2017 applicants without prior second level higher or bachelor level education in healthcare or science have had mandatory preparatory courses to study in the RSU programme "Art therapy" ([profession standard](#) approved on 22.10.2008. - only in Latvian), where subjects such as "Anatomy", "Physiology and neurophysiology", "Biology and genetics", "Pathological physiology", etc. are acquired in the amount of 20 CP/30 ECTS, according to the level of knowledge required by the functional specialist. The content included in the training courses shall be equal to the content of courses carried out in other RSU Faculty of Rehabilitation study programmes (e.g. "Audiology/Speech therapy", "Occupational therapy"). This leads to a process of equalisation of knowledge between applicants with and without prior education in healthcare or health science. On the other hand, study courses included in the StP "Art therapy" allow further understanding of work in healthcare, already focusing on aspects of healthcare specific to the profession of an art therapist, such as the course "Medical rehabilitation and teamwork" (4 CP/6 ECTS), "Psychiatry foundations" (4 CP/6 ECTS), "Psychosomatic medicine" (2 CP/3 ECTS), specialisation courses dedicated to evaluation (2 CP/3 ECTS), basic principles for working with different groups of patients and clients individually and in a group (4 CP/6 ECTS), practices of 26 CP/39 ECTS in a healthcare environment.

During studies, an important emphasis is also placed on educating students about responsibility for their personal and professional development by attending personal training therapy. Various support mechanisms have been included in the study programme (including in the course Vocational Growth Group in year 1 of studies and supervision in the group in year 2 of studies), but a process organised personally by students, experienced outside the institution of higher education, is also important. In order to motivate students to attend personal training therapy, a condition has been introduced regarding a certain amount of therapy hours (50 hours individually and 50 hours in a group), which must be visited by a certified art therapist or a certified psychotherapist or a certified psychotherapy specialist in order to get certified as an art therapist.

[1] European Consortium for Arts Therapies Education. <http://www.ecarte.info>

[2] European Music Therapy Confederation. <https://emtc-eu.com/>

[3] European Association of Dance Movement Therapy. [www.eadmt.com](http://www.eadmt.com)

[4] European Federation of Art Therapy. [www.efat.com](http://www.efat.com)

[5] European Federation of Drama Therapy. [www.efdramatherapy.com](http://www.efdramatherapy.com)

### **3.1.3. Economic and/ or social substantiation of the study programme, analysis of graduates' employment.**

According to the National Encyclopaedia, art therapy is “a field of health care in which, under the guidance of an art therapist, interventions and reflection based on artistic expression are used in a therapeutic setting, individually or in a group, face-to-face or remotely, to address and prevent physical and/or mental health and/or social problems in patients or customers, as well as for personal growth, after assessment and agreement”[1]. Art therapist, according to Section 45.<sup>2</sup> of the Medical Treatment Law[2], is a health care professional, a functional specialist who, in accordance with their competence in medical treatment, is familiar with the assessment of human functional limitations and the principles of rehabilitation, performs treatment using appropriate diagnostics, assessment and medical technologies, and gives opinions, as well as carries out professional education work.

Art therapy is a relatively new profession, which started to develop into a separate, autonomous profession using clinical research-proven practices after World War II. It has grown rapidly in the last 50-60 years, when the biopsychosocial model of health began to dominate medicine, recognising the holistic nature of health and problems thereof, i.e. that health and ill-health have not only biological but also psychological and social components. This is why health care involves experts from different fields working together in a multiprofessional way to achieve common goals in patient recovery. Art therapists primarily belong to the group of psychosocial assistance providers and now also work in medical rehabilitation clinics where, in addition to the psychological field, they are also responsible for patient functions such as speech and comprehension, hand and foot motor skills, gait stability and cognitive function.

The origins of art therapy in Latvia can be traced back to the time when the country regained its independence and, with the opening of the Iron Curtain, experts and knowledge in various fields, including art therapy, became available. There was a great deal of interest in the methods and techniques used in art therapy, especially among psychologists, social workers, educators and artists, and initially it was organised in the form of seminars and master classes. In 2003, it was decided to follow the path of art therapy as an autonomous profession in Latvia: a professional standard was created and soon after (in 2006) a study programme was established in Rīga Stradiņš University. In 2012, the profession joined the family of functional specialists.

Since the beginning of the programme, almost 200 art therapists have graduated from it, mainly working in health care (medical rehabilitation teams in psychiatric and somatic clinics), social care and special education institutions.

Feedback from students, alumni and employers is essential to ensure the achievement of the objectives of the study programme and to improve the quality of studies. It is obtained through surveys and the involvement of the study quality councils, placement and final thesis defence commissions.

In addition to the regular student and alumni satisfaction surveys organised at RSU, every 3-5 years the study programme director conducts an electronic alumni survey to obtain detailed information on various aspects of alumni employment (work environment, form of work (individual or group, online or face-to-face, individual or team), form of employment, customer/patient profile and outcomes to be achieved, duration of the art therapy process, etc.) as well as alumni assessment of the competences and skills acquired during their studies.

A survey carried out in December 2021 with 61 respondents (about a third of them RSU alumni) showed that 89.2% of the participants work as art therapists, while 10.8% integrate the knowledge acquired in their studies into related professions (social work, psychology, special pedagogy). 53.4% of respondents work as an art therapist part-time or more, in social services (38.9%), medical rehabilitation (31.5%) and mental health care (29.6%); 41% also work as an art therapist in private practice. The most common format of collaboration is individual (94.4% – this high proportion is probably due to the Covid-19 factor, as group work was not possible in 2020-2021 due to epidemiological restrictions). In 70% of cases, the art therapist works with the patient/customer for 1–10 sessions (this is mainly due to the short length of stay of patients in health care institutions, as well as the format of deinstitutionalisation etc. projects in the field of social services, which require 10 sessions as a course).

The survey data also reveal that the three main groups of patients seen by art therapists are adults, young people and children with emotional and social problems. When asked which competences acquired during their studies are the most useful in their professional work, the three most important competences specified were individual and group psychological counselling, knowledge and skills in the specialisation (methods, techniques), as well as courses in which students had the opportunity of self-reflection, self-development and self-experience. The competences that alumni perceive as lacking are those related to the ability to reformulate the language of art therapy in terms that patients, their families and the multiprofessional team can understand. These data should be treated with caution as they do not cover the entire population of art therapists, but they do confirm information that can be gathered in the form of trends from conversations with leaders of professional associations and alumni and observed as current developments in continuing education.

[1] National Encyclopaedia. *Arts Therapy*.

<https://enciklopedija.lv/skirklis/102328-m%C4%81kslu-terapija>

[2] Medical Treatment Law. 12.06.1997 Official Publisher of the Republic of Latvia, 167/168, 01.07.1997, <https://likumi.lv/ta/id/44108-arstniecibas-likums>

#### **3.1.4. Statistical data on the students of the respective study programme, the dynamics of the number of the students, and the factors affecting the changes to the number of the students. The analysis shall be broken down into different study forms, types, and languages.**

Professional Master's study programme "Art Therapy" is implemented only for full-time students in Latvian. In the academic year 2022/2023, there are 66 students (including those on academic leave) in the study programme, and the number of students has been similar throughout the reporting period.

The number of alumni has been inconsistent over the reporting period, ranging from 8 (academic

year 2019/2020) to 21 (academic year 2022/2023), but close to the number of students initially enrolled – 16 students (except for academic year 2019/2020, when 30 students were enrolled in the programme). Students dropping out of the programme is most often due to study load, which is difficult to balance with other areas of life, and, for students in self-funded places, also to financial circumstances.

As of the academic year 2021/2022, admission to the programme is in pairs of specialisations, i.e. in the academic year 2021/2022, students were enrolled in Dance and Movement and Drama Therapy specialisations, while in the academic year 2022/2023, students were enrolled in Visually Plastic Art, as well as Music Therapy. The move to this arrangement allows the 10 state-funded study places and 6 study places for tuition fee to be shared among students from just two specialisations rather than all four, which has several advantages:

- this allows for larger specialisation groups (on average 8 students per group), which has a positive impact on the study process, as students have the opportunity to share their experiences more and form interest groups, for example in the field of research, and the larger number of students allows for more variation when practicing simulation-based teaching methods;
- this allows for more stable specialisation groups to be maintained, as student drop-out rate due to financial constraints is reduced;
- this practice also has a positive impact on the financial situation of the programme as a whole, as the compulsory elective courses, which students study by subgroups of specialisations, have an optimal student load.

Although applicants with at least a Bachelor's or second-level higher education in health care or health sciences are eligible for the programme, but those educated in other fields have compulsory preparatory courses for studies in the Art Therapy programme, interest in the programme is stable – on average 4-5 applicants per state budget-funded study place in the StP (for example, 47 applicants took the admission examinations in the 2022 admission, and 41 applicants in the 2021 admission).

To facilitate student recruitment, the StP participates in activities organised by the RSU Communication Department such as the Open Day and Try Studies, maintains up-to-date information on the RSU website in the programme section, including alumni testimonials and information about their employment. Professional associations are an important partner in informing potential students, as their events (masterclasses, continuing education events such as the Summer School) help both to disseminate information about the profession and to provide an opportunity to experience art therapy. An important source of information for potential students is the annual conference Health and Personality Development: An Interdisciplinary Approach organised by the RSU Department of Health Psychology and Pedagogy (the eighth annual conference took place in 2022), to which art therapists also make an important substantive contribution. At this conference, RSU students and teaching staff provide information on the process and results of their scientific work, there are several sections devoted to professional activities in art therapy (such as professional identity, professional development, working with different patient/customer groups and/or methods and approaches), as well as reports, lectures and masterclasses on the work of international colleagues in art therapy.

*Erasmus+* offers outgoing student mobility placements in the study programme. Students mostly take up this opportunity at the end of their second year of studies, when they have acquired skills they can use during placement at the host institution or as an alumni. StP students are at an age when they are working in their main job alongside their studies, they tend to have important daily responsibilities in other areas of their life, and the opportunity to leave their usual environment for



at least two months (while also partially financing this period of mobility abroad) is limited to individual students, so only 1-3 students per academic year take advantage of such mobility. During the reporting period (summer and autumn 2022), 5 students went on placement to the NGO *Tikras draugas*, where they were involved in providing psychological support to Ukrainian war refugees in Lithuania, Poland and Romania. In previous years, *Erasmus+* students went on placements to Klaipeda University (Lithuania), organisation *Podaj Dalej* (Poland) and non-governmental organisation in Greece (*System and G*). The activities carried out during the placement have contributed to the development of students' professional skills.

As the study process in the StP is conducted in Latvian, inbound mobility is not implemented.

### **3.1.5. Substantiation of the development of the joint study programme and description and evaluation of the choice of partner universities, including information on the development and implementation of the joint study programme (if applicable).**

## **3.2. The Content of Studies and Implementation Thereof**

### **3.2.1. Analysis of the content of the study programme. Assessment of the interrelation between the information included in the study courses/ modules, the intended learning outcomes, the set aims and other indicators with the aims of the study course/ module and the aims and intended outcomes of the study programme. Assessment of the relevance of the content of the study courses/ modules and compliance with the needs of the relevant industry, labour market and with the trends in science on how and whether the content of the study courses/ modules is updated in line with the development trends of the relevant industry, labour market, and science.**

In order to achieve the objectives of the StP, the thematic plan for the implementation of the StP foresees that in the first semester students will study courses that create an understanding of the professional activity in art therapy, such as Professional Activity and Legal Base of Arts Therapies , Medical Rehabilitation and Teamwork, courses Music/Drama/Dance and Movement Therapy / Visually Plastic Art Therapy I, blocks on the history of the development of art therapy, the path to health care profession status and theoretical approaches. Students also undergo placement, where they observe sessions and analyse the work of an art therapist of their specialisation in three different working environments – health care, social care and special education. In this semester, students also begin to learn about evidence-based practice and research as a cognitive process in providing such practice (for example, an information literacy unit in the professional activity course, Research Methodology).

In the second semester, the share of field-specific study courses is increasing, e.g. the Music/Drama/Dance and Movement Therapy / Visually Plastic Art Therapy I course block on patient/customer assessment, course Principles and Process of Evaluation in Art Therapy, a focus on patient groups in both psychiatry (course Basics of Psychiatry) and somatic medicine (course

Medical Rehabilitation and Teamwork), the acquisition of theoretical and practical skills in counselling is also ensured (course Individual Counselling in Art Therapy and Psychodynamics). Students integrate the acquired knowledge in practice in the course Assessment Practice, where they assess several patients of different ages, using both conversation and art-based assessment (in their specialisation), documenting the results of the assessment, setting potential goals for working with a given patient and developing a potential therapy plan. In parallel with the Research Methodology course, there is study work, which provides students with the skills for independent research work, which will be needed for the Master's thesis. At the end of this semester, a research project is developed.

The third and fourth semesters are designed to provide theoretical training and practical skills in working with patients of different groups individually (third semester) and in groups (fourth semester). In the second year of studies, there are also two clinical placements (each 10 weeks long, where one involves individual work with different patients/customers and the other involves works with groups). A supervision group, led by an experienced lecturer and supervisor, which meets approximately once a week, provides an important learning and self-reflection experience for students during their placement. A major task of the second year of studies is the formulation of the topic and methodology of the Master's thesis, which culminates in the approval of the topic by the Council of the Faculty of Rehabilitation.

In the final (fifth) semester, students consolidate and integrate what they have learnt in the previous stages of their studies: they develop their Master's thesis and practise their practical professional skills through role-plays and simulations.

The student chooses the specialisation to be acquired already when he or she takes entrance examinations for studies programme, thus students with already developed artistic skills in the selected specialisation are enrolled, for example, music therapy students manage at least one musical instrument and voice, visually plastic art therapy students – work with different art materials, foundation of composition, etc. The content of studies in the programme is organised in such a way that the A-level courses are substantively identical to the students of all four specialisations (for example, “Professional activities in art therapy and legal foundations”, “Study methodology”, “Psychosomatic medicine”, etc.), while the acquisition of knowledge and skills specific to specialisation, including integration with those acquired in A-level study courses, is implemented in B or mandatory choice courses. For example, in the specialisation of music therapy, such courses are Music Therapy I, where in semester 1 the content of studies is developed in relation to history, theoretical approach and philosophy of the profession, as well as detailed, therapeutically driven music playing, improvisation, etc. skill acquisition, in semester 2 students learn evaluation in music therapy, and in semester Music Therapy II – semesters 3 and 4, students learn work individually and in group with different groups of patients and clients using a simulation-based approach. All theoretical knowledge is strengthened in practice, in the specific specialisation. On the same principle, combining compulsory Part A and compulsory Part B courses also creates training in other specialities: Visually plastic art, Drama and dance and Motion therapy.

Linking of the objective of the StP and the results to be achieved with study courses is achieved by integrating the results to be achieved by the StP into the achievable results of study courses and by specifically defining the knowledge, skills and competences to be acquired. Study courses provide for the acquisition of theoretical knowledge and skills in the form of contact classes (in person or online), as well as the part of the student's independent work. The test forms used in study courses provide the basis for verifying the acquired learning outcomes at the level of individual courses, as well as the national examination is the basis for assessing the results to be achieved by the StP in the case of each student. The link between the study programme and the study courses is reflected in Annex 18.1.

To ensure that students have a sufficient foundation of medical knowledge for the profession, since 2017, applicants without prior second-level higher education or Bachelor's level education in health care or science are required to take preparatory courses for the Art Therapy study programme ([profession standard](#) approved 22.10.2008.) This ensures a levelling of knowledge between applicants with and without prior training in health care or health science. Study courses included in the study programme "Art therapy" allow further understanding of work in healthcare, already focusing on aspects of healthcare specific to the profession of art therapist, such as the course "Medical rehabilitation and teamwork" (4 CP/6 ECTS), "Psychiatry foundations" (4 CP/6 ECTS), "Psychosomatic medicine" (2 CP/3 ECTS), specialisation courses dedicated to evaluation (2 CP/3 ECTS), the basic principles for working with different groups of patients and clients individually and in the group (4 CP/6 ECTS), practices in the amount of 26 CP/39 ECTS, including already starting from semester 2 in the clinical environment.

In the coming years, it is also planned to develop study material that provides a foundation of psychological knowledge for the profession, which is not available to applicants without prior training in psychology and counselling experience. Completion of this material is not planned as a prerequisite for admission, but a test will be given to check applicants' knowledge of psychology.

The content of the study programme is regularly improved and the descriptions of study courses, the content of lectures and lessons are reviewed each year, including the latest scientific knowledge and updating the recommended sources of literature for students (see Annex 23.1). In planning improvement, an important source of information is the STP quality Board with representatives of students, teaching staff and employers. Cooperation with practitioners who provide information on their observations on students' knowledge, skills and competence is also important. Valuable information is also gathered from regular alumni surveys.

While working on the self-assessment report, a mapping against the existing profession standard was produced, but in parallel the StP director and several teaching staff have been involved in creating the new profession standard. As of 2 October 2023, when this information is provided, the process of examining the new profession standard has been fully completed among experts nominated by professional organisations, and final approval and entry into force of the document is expected in October. To achieve consistency between the content of the study programme and the work tasks of the art therapist specified in the standard and the necessary competences, StP mapping against the new standard will be performed and improvement work will be performed. At the same time, it should be noted that due to the direct involvement of the Director of StP and awareness of the content of the future standard, the development of study content in fields that can be identified as new, such as digital and multicultural competence in art therapy, is already ensured.

**3.2.2. In the case of master's and doctoral study programmes, specify and provide the justification as to whether the degrees are awarded in view of the developments and findings in the field of science or artistic creation. In the case of a doctoral study programme, provide a description of the main research roadmaps and the impact of the study programme on research and other education levels (if applicable).**

Upon the completion of the StP "Art Therapy", students take a national (qualification) exam, defend their Master's thesis and, on the basis of these examinations, receive the professional Master's degree in health care and the qualification of art therapist in one of the four specialisations.

To grant master's degrees to students of the study programme based on modern knowledge of the health sector, students of StP "Art therapy" develop and defend Master's thesis. In the course of the development of the work, students are bound by both documents which generally regulate the development of the final paper in the RSU (for example, the "RSU Regulation on the Development and Defence of qualifications papers, Student Research papers, Bachelor's thesis and Master's thesis") and the research process developed by the StP Department of Health Psychology and Pedagogy for the Development of Master's thesis. The selection of the subject and manager of the Final Paper shall be performed by co-operation of the student with the potential work manager, but the co-ordination of the topic after pre-advocacy of the project shall be provided by the Council of the Faculty of Rehabilitation.

Subsection 3.2.6 of and Annex 22 to this document provide more detailed information on the topics of final theses, so only a few examples are included here, reflecting the relevance of the study programme to current developments in the profession (in terms of both scientific and professional development) and in society at large:

- the identity of art therapist (e.g. in the context of the dual role of functional specialist and psychological support provider) and professional development (e.g. in the context of digitalisation);
- development and efficiency testing of evidence-based, including digital, short-term and single-session interventions in work with different patient groups (e.g. patients with chronic pain, stroke, oncological diseases), including for alleviating different symptoms (e.g. regulation of emotions, pain, actualisation of psychological resources) specific to many patient groups;
- professional activity in a variety of settings, including schools and social care, where the status of art therapists is not defined by regulations and requires working with decision-makers at different levels. In this case, students produce systematic literature reviews, which form the basis of briefing materials to be shared with professional associations for further work with decision-makers.

The quality of the Master's thesis developed is generally good. During the reporting period, the most frequently received assessment of Master's thesis is 8 (very good), and each year 1-3 students receive the highest assessment (outstanding). During the reporting period, there has been no Master's thesis assessed with an unsuccessful assessment, i.e. not defended. An analysis of the Master's thesis defended in recent years shows an increase in the variety of study designs chosen and the complexity of methodology.

For more detailed information on the assessments see Annex 22.

National Examination Boards are set up in accordance with external and internal regulations. The Master's thesis defence commission includes RSU teaching staff, as well as representatives from the Liepāja University, Daugavpils University, and Jāzeps Vītols Latvian Academy of Music. The qualification examination board is composed of employers' representatives, including physicians (from the fields of psychiatry and physical rehabilitation medicine) and practitioners who also represent professional organisations (the Union of Professional Organisations of Medical Practitioners of Latvia, Latvian Union of Arts Therapy Associations, Latvian Dance and Movement Therapy Association, Latvian Art Therapy Association, Latvian Music Therapy Association, and Latvian Drama Therapy Association). At the end of the examinations, the members of the commissions provide a summary of the results, an overview of the positive aspects observed as well as the improvements needed, which are discussed and, where possible, integrated into the StP.

The organisation and content of the StP comply with the requirements set out in the laws and

regulations of the Republic of Latvia. It is designed in accordance with the Professional Standard (version under approval), as well as current developments in the profession in Latvia and worldwide. The new profession standard is expected to be approved in October 2023: experts delegated by professional organisations have completed their work and it is planned to deliver the document for further approval in the first week of October 2023.

**3.2.3. Assessment of the study programme including the study course/ module implementation methods by indicating what the methods are, and how they contribute to the achievement of the learning outcomes of the study courses and the aims of the study programme. In the case of a joint study programme, or in case the study programme is implemented in a foreign language or in the form of distance learning, describe in detail the methods used to deliver such a study programme. Provide an explanation of how the student-centred principles are taken into account in the implementation of the study process.**

Professional Master's study programme "Art Therapy" is implemented in form of full-time regular studies for 100 CP / 150 ECTS over five semesters. The first four semesters end with an examination period to test students' knowledge and skills, and the fifth semester concludes with a qualification exam and Master's thesis defence.

The content of the study programme is implemented mainly in collaboration with the teaching staff of the Department of Health Psychology and Pedagogy and the Department of Rehabilitation (including visiting lecturers).

The most frequently used forms of study are contact hours (lectures, classes, seminars and supervisions), consultations, students' independent work, simulation-based learning, placement outside the university, as well as the development of artistic skills in specialisation. Active learning methods dominate the studies, allowing to integrate acquired knowledge with practical skills: interactive methods, discussions, role-plays, simulations, project development (including creation of videos, presentations), educational research. Thanks to the RSU technical resources, lecturers have the opportunity to use multimedia technologies, integrating audio, video and other forms of information transfer, as well as to use more and more actively the possibilities offered by the e-environment. Thanks to the chosen teaching methods, Master's students learn to work both individually and in teams, to describe and critically analyse, as well as to solve situations and problems related to their professional activity.

Students consolidate their professional skills during placement (total of 26 CP / 39 ECTS), which they start in the first year of studies by observing and analysing the work of experienced colleagues during the observation placement, as well as by carrying out assessments of patients/clients of different ages during the assessment placement. In the second year of studies, students undertake clinical placements in health, social care and special education settings, where they experience working with patients in rehabilitation and psychiatric settings, individually and in groups. In the third year of studies, students carry out research in placement. A mentor – an RSU lecturer – is available at each placement institution to provide support and supervision. In the second year, during the period of intensive clinical practice, students have access to regular supervision where they analyse their experience and receive feedback and practical support in problematic situations.

Assessment in the study programme is carried out according to the amount of work (in credit points) and quality of work. At the end of each study course, the student receives an assessment

depending on the type of examination – a pass or a grade on a 10-point scale if the final examination of the study course is an exam. Cumulative assessments are increasingly being introduced in study courses, allowing students to be assessed and give feedback throughout the semester. The study course description (which is also available to students) defines assessment criteria and expected learning outcomes in the form of skills and knowledge, as well as the methods for testing and assessing them. Students also receive information about the tasks to be performed in the study course and the assessment criteria from the lecturer at the beginning of each study course. The information is also posted in the e-studies and is consistent with the study course description. Assessment methods used to evaluate the knowledge, skills and competences acquired include written and oral exams, tests, essays, reports, discussions, presentations, case studies, role-plays and subsequent analysis. Assessment criteria are approved in department meetings.

At the end of their studies, Master's students defend an independently conducted research – Master's thesis – as well as take a qualification exam, where they prepare a clinical case study and demonstrate practical skills, competences and readiness according to the competences required for the profession. The study programme has a successful cooperation with health care professionals, who assess the students' professional readiness by participating in national examination boards.

An essential condition for the functioning of the study programme is the establishment of a programme management and quality assurance system. The quality assurance of the StP "Art Therapy" is based on regular analysis and evaluation of the content of the study subject curriculum at the meetings of the structural units implementing the programme; analysis and control of the study process, which is carried out regularly by analysing the content, quality of the study subject curriculum, results of student surveys and other indicators (e.g. student progress); ensuring integration of the study process and research work; strategic planning of the study process by analysing the strengths, weaknesses and development opportunities of study subject curriculum; cooperation with employers and visiting lecturers. The programme also has a Study Quality Council, which includes employers, professional associations, students and academic staff.

**3.2.4. If the study programme envisages an internship, describe the internship opportunities offered to students, provision and work organization, including whether the higher education institution/ college helps students to find an internship place. If the study programme is implemented in a foreign language, provide information on how internship opportunities are provided in a foreign language, including for foreign students. To provide analysis and evaluation of the connection of the tasks set for students during the internship included in the study programme with the learning outcomes of the study programme (if applicable).**

The StP includes a placement of 26 CP / 39 ECTS.

In the first semester, students go on an observation placement (2 CP / 3 ECTS) during which they observe and analyse the work of a certified art therapist (in the student's specialisation) in three settings: medical rehabilitation (psychiatric or somatic orientation), social work and special education. This phase of placement is carried out in a logical connection with the study courses aimed at providing an understanding of the content and role of the art therapist's work in different teams, theoretical approach and the use of art-based methods in practical work in art therapy.

In the second semester, students go on an assessment placement (2 CP / 3 ECTS), which takes place in parallel with the study courses, where students learn the principles of assessment, both

generally in art therapy and specifically in their specialisation (methodologies, assessment tools). The aim of this phase of placement is to provide the opportunity to apply what has been learnt in practice, including familiarising oneself with the patient/customer medical records, making contact with the patient/customer, conducting the initial interview, planning and conducting the arts-based assessment, summarising and preparing the results in writing and providing information to the team and the patient/customer themselves.

In the third semester, Individual Art Therapy in Practice (10 CP / 15 ECTS) and in the fourth semester Art Therapy in Group Practice (10 CP / 15 ECTS) is implemented. During these placements, students integrate the knowledge and skills acquired in all previous stages of their studies – evaluation, process planning and implementation – using both counselling skills and arts-based evaluation, assessment and documentation. Once a week, students have a compulsory supervision of the placement, which aims both to support and facilitate professional development and to supervise the student. At the end of both placements, a case is prepared and defended in which, following an established structure, the student provides a detailed insight into how the art therapy process is planned and carried out, reflects on their own experience, including making contact with the patient/customer, as well as in the role of a future professional.

In the fifth semester, the course Research in Practice (2 CP / 3 ECTS) is implemented, which is designed in connection with the students' research activities during the Master's thesis development process.

The StP provides students with placement opportunities in the most important health and social care institutions in Latvia, mainly in Riga and major regional cities. It is also possible to go on placement outside the range of organisations offered by RSU, for example in institutions that meet the criteria and are geographically convenient for the student. In recent years, cooperation has been established in this way with placement institutions in Smiltene, Ludza, Krāslava, Daugavpils, Tukums, Sigulda, Krimulda, Strenči and elsewhere. This both supports students' interest in professional activities in the regions and creates contacts that can serve as a first step towards student's employment after graduation. When such placement institutions are introduced, both an agreement between RSU and the institution for the provision of the placement and an employment agreement between RSU and the person acting as the placement supervisor (mentor) are concluded.

### **3.2.5. Evaluation and description of the promotion opportunities and the promotion process provided to the students of the doctoral study programme (if applicable).**

### **3.2.6. Analysis and assessment of the topics of the final theses of the students, their relevance in the respective field, including the labour market, and the marks of the final theses.**

Thematic directions of students' final papers are defined in accordance with development of the field and labour market and the research directions defined by the Department of Health Psychology and Pedagogy (more information available in [Latvian](#) only) and the Department of Rehabilitation (more information in [Latvian](#), in [English](#)), which implement StP study courses.

However, since students choose topics independently and formulate them together with the StP director and scientific supervisors of the paper, final papers may also be on other innovative topics.

Looking closer, in the reporting period the thematic directions of Master's theses fall into one of the following blocks:

- adaptation and design of arts-based assessment tools;
- psychological help and support for different patient/customer groups (including designing interventions and testing their effectiveness);
- professional identity and its development;
- professional performance and evaluation thereof;
- self-help and self-care as a resource in professional and personal life;
- systematic reports.

Although formally the topics of the Master's theses are approved by the Council of the Faculty of Rehabilitation at the end of the 4th semester of studies, the work on choosing the topic starts already in the earlier stages of studies. For example, in the 1st and 2nd semesters of the study course Research Methodology, students develop a research project that is coherent with current developments in the field, which can potentially serve as the basis for a Master's thesis. Another important support for students in both the choice of the topic and its implementation is the participation in the study course Vertical Integrated Project: Psychological Help and Self-Help. This study course has been implemented at the Department of Health Psychology and Pedagogy since spring 2020, and it provides for the cooperation of interested students of different levels (doctoral, Master's, Bachelor's) in interest groups in research of the field of psychological support under the supervision of the head of the study course *Dr. psych. prof. Kristīne Mārtinsone*.

The Master's thesis is submitted and defended at the end of the 5th semester. Students receive an assessment for their final thesis by successfully defending it – presenting and answering questions of the commission. The most frequently received assessment is 8 or “very good”. There has been no unsuccessful or undefended Master's thesis during the accreditation period. It should be noted that many of the students' work is considered excellent and with distinction (35% of the Master's thesis defended on average) and is a valuable contribution to the development of art therapy as a healthcare sector in Latvia. After the Master's thesis is defended, Master's students are invited to publish their research results at professional association conferences and continuing education events, local and international industry conferences, as well as to produce scientific publications. An analysis of the Master's theses defended in recent years shows that the variety of research designs chosen and the complexity of the methodology are increasing.

More information on Master's theses and their assessments can be found in Annex 22.

Methodological Instructions for Developing a Master's Thesis, which provides detailed guidelines for the development and presentation of the thesis, are now available to StP students and is a good support for Master's thesis authors, supervisors and reviewers.

### **3.3. Resources and Provision of the Study Programme**

#### **3.3.1. Assessment of the compliance of the resources and provision (study provision, scientific support (if applicable), informative provision (including libraries), material and technical provision, and financial provision) with the conditions for the implementation of**



**the study programme and the learning outcomes to be achieved by providing the respective examples.**

For the implementation of the StP, both the generally available resources of RSU are used (taking into account the interdisciplinary nature of the programme, these are also the resources available for the health care and psychology study directions), as well as the resources specific to the study programme – materials necessary for the study of the art therapy specialisation courses: musical instruments (for example, piano, percussion instruments of various sizes, kokle, mini harp, etc.), music recordings, playback devices, diverse visual plastic art materials, props for learning dance, movement and drama therapy specialisations (for example, exercise mats, balls, scarves, associative cards, photographs, finger puppets, etc.). The department implementing the relevant study courses budgets annually for the maintenance and addition of these materials.

The provision of e-resources **in the Art therapy sector** offers five e-book databases and eleven magazine full text databases. The availability of E-resources is the same for all units in the library.

E-books on art therapy as well as on research methods are available in subscribed databases **eBook Academic Collection (EBSCO), eBook Central (Proquest), AccessMedicine, ClinicalKey and SAGE Research Methods**. *EBook Academic Collection (EBSCO)*, for example, has 1,059 e-books searching for the keywords “Art and Therapy” and *eBook Central (Proquest)* holds 539 e-books. In *Clinicalkey* and *AccessMedicine*, book chapters are available, searching for the keywords “Art therapy.”

Full texts of scientific papers in Art therapy are available in subscribed databases: **Sage Premier 2023, Health Research Premium Collection (ProQuest), MEDLINA Complete (EBSCO), Communication Source (EBSCO), Sociology Source Ultimate (EBSCO), Academic Search Complete (EBSCO), Wiley Online Journals, psychARTICLES (APA), BMJ Journals, ClinicalKey Journals (Elsevier), Science Direct (Elsevier)**. In the single search engine *Prima Industry*, 6,939 magazine names appear at “Health Sciences”. Subscribed e-log databases provide the results of selected information by searching for a wide variety of topics/keywords, such as *Health Research Premium collection (ProQuest)* has 84149 publications on Art and Therapy, *MEDLINA Complete (EBSCO)* has 97958 publications, and *Wiley Online Journals* has 104426 publications.

There are also four evidence-based medical databases available at *ClinicalKey Clinical Overviews (Elsevier)*, *the Cochrane Library (Wiley)*, *DynaMed (EBSCO)*, *UpToDate*.

Dissertations from many countries around the world in various fields of science, including art therapy, are available in *ProQuest Dissertations & Trends Global: The Sciences and Engineering Collection*.

Students are also given access to news and reference databases such as *Encyclopedia Britannica Academic Edition*, *Letonica*, *LETA news archive*, *Nozare.lv*, *News.lv (Lursoft)*.

A section such as “Art therapy” is available in the open-access e-resources compiled by Library employees.

**3.3.2. Assessment of the study provision and scientific base support, including the resources provided within the framework of cooperation with other science institutes and higher education institutions (applicable to doctoral study programmes) (if applicable).**

**3.3.3. Indicate data on the available funding for the corresponding study programme, its funding sources and their use for the development of the study programme. Provide information on the costs per one student within this study programme, indicating the items included in the cost calculation and the percentage distribution of funding between the specified items. The minimum number of students in the study programme in order to ensure the profitability of the study programme (indicating separately the information on each language, type and form of the study programme implementation).**

It is planned to finance the study programme from the state budget and the funds of private and legal persons by setting the tuition fee in accordance with the state budget funding without social security in the amount of EUR 7335 for a study year. Discounts on tuition fees are possible in accordance with internal regulatory documents. The number of students planned to reach in the two and a half years of studies of the study programme is 52 students, with 17 students admitted in the first year of studies, and the number of students remaining unchanged during the study years. Such a number of students is optimal to ensure a high quality study process and so that the study programme can cover implementation and development costs.

The funding is used for staff remuneration, attraction of visiting lecturers, taxes, maintenance of IT infrastructure, purchase of equipment and facilities and expenditure on study visits. In addition to the direct costs of delivering lectures and conducting classes, the study programmes have to cover infrastructure maintenance costs (premises, IT solutions) and costs of other RSU common resources used in the study programmes (Student services, Library, organisation of the study process, grant to the Student Union and other support and administrative functions).

The study programme is implemented by Department of Health Psychology and Paedagogy of the Faculty of Public Health and Social Welfare, Department of Psychiatry and Narcology, Statistics Unit, Department of Clinical Skills and Medical Technology of the Faculty of Medicine, the Department of Rehabilitation of the Faculty of Rehabilitation and the RSU Library. Remuneration of academic staff for the first year of the study programme is planned at approximately EUR 40 000.

*Table 2. Cost of the Study Programme*

<b>Title</b>	<b>Outcome with the existing tuition fee</b>
Average revenue per student, EUR	4 287
Average cost per student, EUR	3 509
Academic staff, %	55
Resources of departments, %	2
Other direct expenditure, %	5

Students' clinical training and placement costs, %	1
Scholarship costs, %	5
Ongoing costs, %	4
Overhead costs, %	28

### 3.4. Teaching Staff

**3.4.1. Assessment of the compliance of the qualification of the teaching staff members (academic staff members, visiting professors, visiting associate professors, visiting docents, visiting lecturers, and visiting assistants) involved in the implementation of the study programme with the conditions for the implementation of the study programme and the provisions set out in the respective regulatory enactments. Provide information on how the qualification of the teaching staff members contributes to the achievement of the learning outcomes.**

The qualification of academic staff involved in the implementation of the study programme corresponds to the conditions of implementation of the study programme and the requirements of regulatory enactments, and ensures the achievement of objectives and learning outcomes of the study programme and respective study courses. The director of the study programme Jana Duhovska is a certified art therapist specialising in music therapy, a candidate of scientific degree in medicine with professional experience as an art therapist, as well as in pedagogical and administrative work at RSU (since July 2014 – programme management, since September 2022 also acting as the Vice-Dean of the Faculty of Rehabilitation). The director of the study programme regularly participates in both pedagogical and professional qualification development activities.

The teaching staff involved in the study programme are professors of RSU departments, associate professors, assistant professors, lecturers and assistants from four different RSU structural units, mainly from the Department of Health Psychology and Pedagogy, Faculty of Public Health and Social Welfare (see Annex “Study Programme Plan and Implementers”). The teaching staff involved in the provision of professional study courses in art therapy are highly qualified professionals in their field, representing the leading state and municipally funded health care institutions in Latvia (Riga Psychiatry and Narcology Centre, Psychiatry Clinic of Children’s Clinical University Hospital, state limited liability company Ģintermuiža, NRC Vaivari, Riga East Clinical University Hospital), as well as colleagues working successfully in social care, special education fields and private practices. Class lecturers are also involved in the professional study courses, as well as in the supervision of clinical practices. See in the figure information on academic posts of teaching staff in the study programme and a brief summary (information from Annex 24.7).

The implementation of the compulsory and restricted elective part of the professional Master's study programme "Art Therapy" is carried out by 35 lecturers, 15 of whom have been elected to the academic positions at RSU. Out of 15 elected representatives of the academic staff, 2 are professors and 1 - associate professor (See Table 1, Figure 1, information as of 04.11.2022, current data of elected lecturers are available in the State Education Information (VIIS) System<sup>1</sup>).

No	Lecturer's name, surname	Academic position (studies)/Academic position (research)	Status (elected/invited/main job)	Academic degree/qualification (abbreviation)
1.	Ivars Vanadziņš	Professor/Lead Researcher	Elected	Dr.med.
2.	Kristīne Mārtinsone	Professor/-	Elected	Dr.psych.
3.	Anita Pipere	Acting Professor/-	Acting	Dr. psych.
4.	Oļegs Sabelņikovs	Associate Professor/-	Elected	Dr. med.
5.	Guna Bērziņa	Assistant Professor/-	Elected	Dr. med.
6.	Jelena Vrubļevska	Assistant Professor/-	Elected	Dr. med.
7.	Kristaps Circenis	Assistant Professor/-	Elected	Dr. med.
8.	Velga Sudraba	Assistant Professor/-	Elected	Dr.med.
9.	Inese Paiča	Lecturer/-	Elected	-
10.	Jana Duhovska	Lecturer/-	Elected	-
11.	Kristīne Vende-Kotova	Lecturer/-	Elected	Dr. psych.
12.	Sanita Šuriņa	Lecturer/-	Elected	-
13.	Diāna Kalniņa	Acting Lecturer/Acting Researcher	Acting	-
14.	Zane Gulbe	Acting Lecturer/-	Acting	-
15.	Elīna Akmane	Assistant/-	Elected	-
16.	Kristīne Šneidere	Assistant/Researcher	Elected	-
17.	Nikita Bezborodovs	Assistant/-	Elected	-
18.	Zane Kriķe	Assistant/-	Elected	-
19.	Sintija Lielšvāgere-Endele	-/Acting Research Assistant	Acting	-
20.	Beate Evelīna Dišlere	Adjunct Lecturer/-	Adjunct Lecturers	-
21.	Diāna Zande	Senior Lecturer/-	Invited	Dr. psych.
22.	Agne Rožlāpa-Junkere	Lecturer/-	Invited	-
23.	Anda Upmale-Pukīte	Lecturer/-	Invited	-
24.	Anna Šteina	Lecturer/-	Invited	-
25.	Elīna Cauna-Nitavska	Lecturer/-	Invited	-
26.	Grieta Pīrāga	Lecturer/-	Invited	-
27.	Ilze Lejniece	Lecturer/-	Invited	-
28.	Ilze Plūme	Lecturer/-	Invited	-
29.	Indra Majore-Dūšeļe	Lecturer/-	Invited	-
30.	Ineta Heinsberga	Lecturer/-	Invited	-
31.	Inga Bitēna	Lecturer/-	Invited	-
32.	Laura Danilāne	Lecturer/-	Invited	-
33.	Madara Sprūdža	Lecturer/-	Invited	-
34.	Mirdza Paipare	Lecturer/-	Invited	-
35.	Sandra Aleksandra Hartmane	Lecturer/-	Invited	-

Foreign visiting lecturers are recruited to improve the study programme content and introduce innovative methods in the study process. During the reporting period, the following visiting lecturers have given public lectures/classes and master classes in the StP: D. Havsteen-Frenklin (Great Britain), R. Bader (Germany), J. Volonts (USA), V. Aleksiene (Lithuania), S. Pendzik (Israel), A. Seymour (Great Britain), T. De Moor (Netherlands), M. A. Del Collo (Great Britain), J. Junker (Germany), N. Sajnani (USA), M. Willemsen (Netherlands), V. Karkou (Great Britain), etc. It should be emphasised that due to the interdisciplinary nature of the profession of art therapist and also of the StP, the study content of the StP "Art Therapy" is also relevant for visiting lecturers dealing with psychological counselling, medical rehabilitation and psychiatry.

Summarising the information on teaching staff who are RSU alumni, it is concluded that 28 lecturers have graduated from RSU study programmes (from one to three), while four lecturers are currently (in the academic year 2022/2023) studying in one of the programmes.

When analysing the composition of teaching staff, it should be noted that StP "Art therapy" has only a relatively small proportion of teaching staff with a doctoral degree (10 out of 35 teaching staff),

however, in accordance with Section 39 of the Law on Higher Education Institutions, taking into account the need to acquire practical skills and knowledge, the subjects of the profile of professional higher education programmes (professional study programmes) may be lectured by a person with higher education without a doctor of science degree, if it has sufficient practical seniority corresponding to the study course to be taught, a period of at least five years, which is a criterion that is carefully followed and is also in line with the RSU guidelines.

For the professional study programme, the resource is the involvement of industry experts in the study process, ensuring the realization of professional study courses, for example, colleagues with great experience in art therapy with different patients in different work environments – Inese Paiča, Anda Upmale-Puķīte, Ineta Heinsberga, Kristīne Vende-Kotova – implement practically oriented (B compulsory choice) study courses in specializations and the course “Art therapy process with different patient/client groups”, assistant Professor Velga Sudraba, physician-psychotherapist, doctors in the psychosomatic medicine course, colleagues with specially developed artistic skills – such as Laura Danilāne, Anna Šteina, Grieta Pīrāga – make an important contribution in developing students' creativity and ability to use as many arts languages as possible, etc.

#### **3.4.2. Analysis and assessment of the changes to the composition of the teaching staff over the reporting period and their impact on the study quality.**

Over the accreditation period, the composition of the teaching staff has stabilised and there have been no significant changes in the composition of the teaching staff. It is worth noting the growth of the lecturers, who have successfully completed their doctoral studies in RSU programmes: Medicine (Jana Duhovska, Indra Majore-Dūšele) and Psychology (Elīna Akmane, Inese Paiča, Kristīne Šneidere); one of the colleagues – Santa Šuriņa – successfully defended her doctoral thesis in psychology at the end of 2022.

From 1 January 2017 to 1 October 2022, 25 lecturers of the Master's study programme “Art Therapy” participated in continuing education activities of the Centre for Educational Growth attending more than 90 training activities of different content. In total, teaching staff of the Art Therapy study programme spent 2186 academic hours on continuing education activities.

The teaching staff participated in the following activities of the Centre for Educational Growth:

- Creating Animated Visual Study Materials;
- Reference Management Tool EndNote;
- Remote Group Work of Students Using the Miro Tool;
- Collaboration and Partnership Towards Professional and Sectoral Development: Local, National, Transnational;
- Creating Engaging and Interactive Classrooms through Active Learning Techniques;
- Digital Darwinism – What It Means for Us Each and Our Institution;
- Teaching in a Cross-Cultural Environment;
- Think Tank: How to Assess to Learn?;
- Creating Electronic Tests;
- Potential of Immersive Technologies for Efficient Learning Strategies;
- Processing of Photos for Visually Appealing Study Materials;
- Interactive Presentations and Real-Time Feedback in the Mentimeter Tool;
- Improvisation in Pedagogical Work;
- How Games Activate Teaching and Learning;

- The Potential of Conflict to Build Cooperation;
- Research Methodology and Statistical Processing of Data;
- Visualisation of Content in Presentations;
- Assessment Approaches and Types of Examinations in Remote Studies;
- Creating Videos: Complex in a Simple and Short Way.

**3.4.3. Information on the number of the scientific publications of the academic staff members, involved in the implementation of doctoral study programme, as published during the reporting period by listing the most significant publications published in Scopus or WoS CC indexed journals. As for the social sciences, humanitarian sciences, and the science of art, the scientific publications published in ERIH+ indexed journals or peer-reviewed monographs may be additionally specified. Information on the teaching staff included in the database of experts of the Latvian Council of Science in the relevant field of science (total number, name of the lecturer, field of science in which the teaching staff has the status of an expert and expiration date of the Latvian Council of Science expert) (if applicable).**

**3.4.4. Information on the participation of the academic staff, involved in the implementation of the doctoral study programme, in scientific projects as project managers or prime contractors/ subproject managers/ leading researchers by specifying the name of the relevant project, as well as the source and the amount of the funding. Provide information on the reporting period (if applicable).**

**3.4.5. Assessment of the cooperation between the teaching staff members by specifying the mechanisms used to promote the cooperation and ensure the interrelation between the study programme and study courses/ modules. Specify also the proportion of the number of the students and the teaching staff within the study programme (at the moment of the submission of the Self-Assessment Report).**

The cooperation between the teaching staff members involved in the implementation of study courses, which is essential for the quality assurance of the implementation of the study programme, is ensured by various measures that are implemented in the involved structural units, as well as in the course of the implementation of each specific study course. Before the beginning of each semester, the teaching staff involved in the implementation of the study course, under the guidance of the head of the study course, review the planning of the study course and topical issues related to its implementation. To ensure the interconnection and succession of study courses, the study programme director organises meetings with the heads of study courses.

Since the implementation of the study programme is ensured by the teaching staff of the Department of Health Psychology and Pedagogy, including the study programme director, the

cooperation with the teaching staff and the department management is close and productive: regular meetings are organised at the beginning of the semester, as well as meetings as needed, also in a remote format. Taking into account that the profession of art therapist is still new in Latvia and that the RSU programme (as well as the similar programme of the Liepāja University) concentrates research and conceptualisation and development potential of the profession, teaching staff regularly discuss and describe topics relevant to the development of the profession, for example, an entry was made in the National Encyclopaedia (prepared by Kristīne Mārtinsone and Jana Duhovska, available only in [Latvian](#)). Teaching staff is actively involved in updating the professional standard, improving the description of medical technologies, supervising sections on art therapy at conferences (see 3.1.4), etc. This work is the result of successful collaboration, which undoubtedly also benefits the students.

Another important resource is the annual conference Health and Personality Development: An Interdisciplinary Approach organised by the RSU Department of Health Psychology and Pedagogy, Faculty of Public Health and Social Welfare, which took place for the 8th time in 2022. It is an excellent platform for students and practitioners from the field of psychological support to meet, listen to presentations, discuss topics of common interest (e.g. assessment and research, helping different patient/customer groups, health behaviour, self-help, etc.), and gain experience in practical master classes. It should be noted that StP teaching staff, in collaboration with other colleagues, are actively involved in the organisation of the conference, shaping its content, attracting visiting speakers and other presenters, as well as ensuring the practical running of the conference. The regular RSU Scientific Conference, including the Student Scientific Conference, as well as the Latvian National Rehabilitation Congress, organised by the Latvian Association of Rehabilitation Professional Organisations in cooperation with RSU, should be mentioned as important resources. These events also provide an opportunity for students and teaching staff to share information about their work, to learn about the latest developments of other colleagues, and to find ideas for improving the quality, content and methods of studies.

The ratio of the number of students and teaching staff in the study programme: 72 students and 35 lecturers. The ratio of the number of students and teaching staff is 2.1.

# Annexes

III - Description of the Study Programme - 3.1. Indicators Describing the Study Programme		
Sample of the diploma and its supplement to be issued for completing the study programme	24.1_Diploma_and_Supplement_Art_Therapy.pdf	24.1_Diploms_un_pielikums_PMSP_Makslas_terapija.pdf
For academic study programmes - Opinion of the Council of Higher Education in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions (if applicable)		
Compliance of the joint study programme with the provisions of the Law on Higher Education Institutions (table) (if applicable)		
Statistics on the students in the reporting period	16_Anx_Statistics_Art_Therapy.pdf	16_pielik_Makslas_terapija_statistika_lv.pdf
III - Description of the Study Programme - 3.2. The Content of Studies and Implementation Thereof		
Compliance with the study programme with the State Education Standard	17.1_pielik_PMSP_Makslas_ter_atbilstiba_izglitiba_standartam_ENG.pdf	17.1_pielik_PMSP_Makslas_ter_atbilstiba_izglitiba_standartam.pdf
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard or the requirements for professional qualification (if applicable)	18.2_Anx_Mapping_StP_to_Profession_Standard_Art_Therapy.pdf	18.2_Profesijas_standarta_kartejums_Makslas_terapija.pdf
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)	17.2_pielik_Atbalstiba_nozares_specifiskajam_regulejumam_Makslas_ter_ENG.pdf	17.2_pielik_Atbalstiba_nozares_specifiskajam_regulejumam_Makslas_ter.pdf
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	18.1_Anx_Study_Course_Mapping_Art_Therapy.pdf	18.1_pielik_Studiju_kursu_kartejums_StP_studiju_rezultatu_sasniegšanai_PMSP_Makslas_terapija.pdf
The curriculum of the study programme (for each type and form of the implementation of the study programme)	19_Anx_Study_Plan_Art_Therapy.pdf	19_pielik_StP_planojums_Makslas_terapija.pdf
Descriptions of the study courses/ modules	20_Anx_Study_course_description_Art_Therapy.pdf	20_pielik_Kursu_apr_Makslas_terapija.pdf
Description of the organisation of the internship of the students (if applicable)	9_Anx_Organisation_of_student_placement_Art_Therapy.pdf	9_pielikums_Studejoso_prakses_organizācijas_apraksts_Makslas_terapija.pdf
III - Description of the Study Programme - 3.4. Teaching Staff		
Confirmation that the academic staff of the doctoral study programme includes not less than five doctors, of which at least three are experts approved by the Latvian Council of Science in the branch or sub-branch of science in which the study programme intends to award a scientific degree (if applicable)		
Confirmation that the academic staff of the academic study programme complies with the requirements specified in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions (if applicable)		



# Public Health (45726)

Study field	<i>Health Care</i>
ProcedureStudyProgram.Name	<i>Public Health</i>
Education classification code	<i>45726</i>
Type of the study programme	<i>Academic master study programme</i>
Name of the study programme director	<i>Anita</i>
Surname of the study programme director	<i>Villeruša</i>
E-mail of the study programme director	<i>Anita.Villerusa@rsu.lv</i>
Title of the study programme director	<i>Dr.med.</i>
Phone of the study programme director	
Goal of the study programme	<i>To train highly qualified specialists for independent practical and scientific research work in the fields of public health: epidemiology, environmental health, health promotion, organisation of health care. The acquired fundamental theoretical knowledge of public health fields and research methodology will enable to plan and implement scientific research, identify and interpret topical problems and propose evidence-based solutions for the improvement of both sectoral policy and practice.</i>
Tasks of the study programme	<i>1) provide students with the opportunity to acquire in-depth theoretical knowledge of public health and research methodology;</i>  <i>2) ensure the development of skills and abilities in the collection, processing and analysis of data necessary for research;</i>  <i>3) develop the ability to link theoretical knowledge and research results with public health practice (interaction between theory and practice);</i>  <i>4) promote the use of theoretical and research findings in evidence-based action in public health practice;</i>  <i>5) ensure acquisition of additional knowledge in elective study courses in order to develop a multidisciplinary approach to solving specific public health problems;</i>  <i>6) facilitate student participation in research (projects, conferences, publications) and to prepare them for further doctoral studies.</i>

Results of the study programme	<p>1) the graduate has acquired a systematic and critical understanding of public health concepts and theories and is able to use these concepts and theories for the justification of research and/or practical activity in various areas of public health;</p> <p>2) the graduate is aware of the multifactorial origins of public health problems, is oriented towards the multifaceted study of public health problems and is able to develop multi-sectoral solutions appropriate to these problems, working in interdisciplinary teams, if necessary, and integrating knowledge of various fields;</p> <p>3) the graduate is prepared for independent research in both local and international research projects and for doctoral studies. Use evidence-based public health perspective in their research and practical activities. Able to offer new knowledge in public health as a result of their research activity;</p> <p>4) the graduate is able to communicate scientific information in multimodal and digital ways to both a professional audience and general public on current public health issues, and is able to support his or her views with scientific means (arguments);</p> <p>5) the graduate understands the dynamics (variability) of public health as a science and practice and therefore keeps abreast of current theoretical and technological innovations in public health and is able to integrate them in the research and solution of routine and topical (acute) public health problems;</p> <p>6) the graduate observes all necessary ethical principles in his/her professional activity in public health science and practice and avoids causing any harm to human health.</p>
Final examination upon the completion of the study programme	Master's Thesis

## Study programme forms

### Full time studies - 2 years - latvian

Study type and form	Full time studies
Duration in full years	2
Duration in month	0
Language	latvian
Amount (CP)	80
Admission requirements (in English)	Higher – professional bachelor's degree or an equivalent degree, or professional higher education with a qualification in the following educational thematic fields: Health care, Social and Human Sciences, Life Sciences, Mathematics and Statistics. For studies in English – English language proficiency at least at B2 level. Entrance examination.

Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	<i>Master of Health Sciences in Public Health</i>
Qualification to be obtained (in english)	-

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### Full time studies - 2 years - english

Study type and form	<i>Full time studies</i>
Duration in full years	<i>2</i>
Duration in month	<i>0</i>
Language	<i>english</i>
Amount (CP)	<i>80</i>
Admission requirements (in English)	<i>Higher – professional bachelor's degree or an equivalent degree, or professional higher education with a qualification in the following educational thematic fields: Health care, Social and Human Sciences, Life Sciences, Mathematics and Statistics. For studies in English – English language proficiency at least at B2 level. Entrance examination.</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	<i>Master of Health Sciences in Public Health</i>
Qualification to be obtained (in english)	-

#### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

### 3.1. Indicators Describing the Study Programme

**3.1.1. Description and analysis of changes in the parameters of the study programme made since the issuance of the previous accreditation form of the study field or issuance of the study programme license, if the study programme is not included on the accreditation form of the study field, including changes planned within the evaluation procedure of the study field evaluation procedure.**

Table 1. Changes in parameters of the study programme (StP)

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period (until 2022)	Planned changes within the assessment procedure (after the accreditation)
1.	Study direction	—	—
2.	Title of StP	—	—
3.	Code according to the Latvian Education Classification	—	—
4.	Head of SP	—	—
5.	Scientific degree of the Head of StP	—	—
6.	Aim of StP	The aim of the StP has not significantly changed. It wording has become shorter	—
7.	Tasks of StP	Tasks have been updated by consolidating them - 6 tasks were created out of 10 tasks	—

<b>No.</b>	<b>Parameter</b>	<b>Description and analysis of changes in StP parameters during the accreditation period (until 2022)</b>	<b>Planned changes within the assessment procedure (after the accreditation)</b>
8.	Learning outcomes to be achieved	6 learning outcomes have been clarified in accordance with StP tasks, which were created by combining the knowledge, skills and competences to be obtained in the learning outcome and defined in the programme	—
9.	Final examination upon the completion of StP	—	—
10.	Type and form of studies	—	—
11.	Duration of implementation	—	—
12.	Language of implementation	—	—
13.	Workload of StP (CP)	—	In accordance with amendments to Section 1(8) of the Law on Higher Education Institutions, which entered into force on 11 October 2022, the transition to the European Credit Transfer and Accumulation System will be implemented until 31 December 2024

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period (until 2022)	Planned changes within the assessment procedure (after the accreditation)
14.	Admission requirements	—	Admission requirements reviewed and amended
15.	Degree to be awarded	—	Degree title changed to correspond with programme code: Master of Health Sciences in Public Health
16.	Qualification to be awarded	—	—
17.	Place of implementation	—	—

No significant changes have been made to the parameters of the study programme since the issuance of the previous accreditation sheet of the study direction. The study programme has been supplemented with new courses elective study studies. When organising working groups with head of courses, the learning outcomes in the study programme and study course descriptions have been updated, harmonising them with the amount of CPs/ECTSs, cross-compliance analysis (mapping) of the learning outcomes of study programme and study courses included therein has been performed, as well as the content of the courses has been supplemented with the latest developments of the sector. During the accreditation period for two years of studies, the programme has received students from foreign countries, mainly from India, Pakistan and China, and has been implemented in English. During the COVID-19 pandemic, regular lectures/classes were implemented in the virtual space via the *Zoom* platform.

The items of change listed in the first table – aim, tasks and learning outcomes – are described in Paragraph 3.1.2.

Within the assessment procedure, admission requirements have been reviewed and adjusted, and applicants are required to take an entrance examination. The degree to be obtained has been clarified to correspond to the Study Program code: Master of Health Sciences in Public Health.

**3.1.2. Analysis and assessment of the study programme compliance with the study field. Analysis of the interrelation between the code of the study programme, the degree, professional qualification/professional qualification requirements or the degree and professional qualification to be acquired, the aims, objectives, learning outcomes, and the**

**admission requirements. Description of the duration and scope of the implementation of the study programme (including different options of the study programme implementation) and evaluation of its usefulness.**

Academic Master's study programme "Public Health" (LEC – 45726) at Rīga Stradiņš University is implemented since academic year 2001/2002, and is a programme included in the health care study direction implemented by RSU and corresponds to the thematic group public health (ISCED code – 0919). The total volume of the study programme is 80 credit points (120 ECTS), of which 60 CP (90 ECTS) as theoretical study courses and 20 CP (30 ECTS) – writing a Master's thesis. It is full-time intramural study programme, which is implemented in two years of studies or four semesters. As a result of graduation from the programme, graduates are awarded a degree of the Master of Health Sciences in Health Care (principal area of studies – Public Health).

Academic Master's Programme "Public Health" was accredited several times during its lifetime for the full accreditation period (six years), with the last accreditation for the programme as part of the health care study direction in 2017. This is the only study programme in Latvia offering to learn in-depth knowledge in public health science and research of public health problems. The mission of the programme is to provide for studies applicable in public health practice and based on theoretical basis of public health science in compliance with guidelines prepared by the Association of Schools of Public Health in the European Region (ASPHER[1]) on public health education[2], thereby promoting development and improvement of public health area as a science and practice in Latvia and international integration.

The **aim** of the study programme is to prepare highly qualified specialists for independent practical and scientific research work in the fields of public health: epidemiology, environmental health, health promotion, health care organisation. The mastered fundamental theoretical knowledge in the fields of public health and research methodology will enable the planning and implementation of scientific research, the identification and interpretation of current challenges and offering of evidence-based solutions to improve sectoral policies and practices.

**Tasks** for achieving the aim of the study programme:

- 1) to provide students with opportunities to acquire in-depth theoretical knowledge in public health and research methodology;
- 2) to ensure the development of abilities and skills in the collection, processing and analysis of data necessary for research;
- 3) to develop the skill to interconnect the theoretical knowledge and research results with health management practice (interaction of theory and practice);
- 4) to promote the use of theoretical and research knowledge in evidence-based actions in public health practice;
- 5) to ensure acquisition of additional knowledge in elective study courses to form a multidisciplinary approach for solving specific public health problems;
- 6) to promote student participation in research (projects, conferences, publications) and prepare for further doctoral studies.

Upon successful completion of the academic Master's study programme "Public Health", the graduate shall achieve the following **learning outcomes**[3]:

- 1) the graduate has acquired a systematic and critical understanding of the concepts of public health and public health theories and is able to use those concepts and theories in the substantiation of research and/or practical activities in different areas of public health;
- 2) the graduate is aware (knows) the multi-factor origin of public health problems, is oriented towards multifaceted research of public health problems and is able to develop multisectoral solutions appropriate to these problems, working in cross-sectoral teams and integrating knowledge from different fields where necessary;
- 3) the graduate has been prepared for independent research activities in both local and international scientific projects and doctoral level studies. Uses the evidence-based public health perspective in his or her research and practical activities. Is able to offer new knowledge in public health as a result of his or her research activities;
- 4) the graduate is able to communicate scientific information in multimodal and digital ways to both the audience of professionals and the general public regarding the current public health issues, as well as is able to substantiate his or her opinion using scientific means (arguments);
- 5) the graduate understands the dynamics (variability) of public health as a science and practice, therefore follows up on current theoretical and technological innovations of public health and is able to integrate them into the research and resolution of routine and current (acute) public health problems;
- 6) in performing his or her professional activities in public health science and practice, the graduate observes all necessary ethical principles and avoids causing any harm to human health.

Given the interdisciplinary nature of the public health field, the admission regulations of the programme provides for enrolment of not only graduates of the professional Bachelor's study programme "Public Health" but of a wider range of applicants. Admission to the study programme requires higher education – a professional Bachelor's degree or an equivalent degree, or professional higher education with qualification in the following thematic field of education: health, social and behavioural science, life sciences, mathematics and statistics.

Applicants take a complex examination, which includes a structured written essay, with an integrated epidemiology task regarding a current public health problem, as well as an individual discussion to ascertain the applicant's previous experience and motivation. In case of equal assessments, the certificates obtained by applicants in statistics, epidemiology, public health, health promotion, environmental health are taken into account; the weighted average grade in the previous education diploma, as well as the scientific publications and professional experience demonstrated in the field of public health.

Admission regulations to the respective year of admission:  
<https://www.rsu.lv/studiju-iespejas/uznemsana/uznemsana-magistra-studiju-programmas>

Admission requirements for international students:  
<https://www.rsu.lv/en/study-here/admissions/post-graduate-programmes>

RSU applicants apply electronically on website <https://www.rsu.lv/en/study-here/admissions>.

Admission regulations fully comply with the multi-professional nature of public health profile. Previous study programme experience gained starting from 2000, proves that students possessing the preliminary knowledge stated in admission regulations allow them to successfully adapt to the study process.

Student admission is carried out in accordance with the Admission Regulation approved by the RSU Senate for the respective academic year and external regulations. In accordance with Paragraph 3



of Cabinet Regulations No. 846 "Regarding Requirements, Criteria and Procedure for Admission to Study Programmes"[4] of 10 October 2006, the rules for admission to study programmes for the following academic year shall be drawn up, approved and published (also on the website) each year by 1 November 2006.

In accordance with the Cabinet Regulations No 505 "Regulations Regarding Recognition of the Study Results Achieved in Previous Education or Professional Experience"[5] one is entitled to submit an application to Rīga Stradiņš University regarding recognition of knowledge, skills and competencies acquired in previous education or professional experience in a study programme or part thereof implemented by the University.

Decision on the recognition of learning outcomes achieved in previous education or professional experience is made by the Commission on Recognition of Learning Outcomes Achieved in Previous Education or Professional Experience established by the University. Its rights, duties, rules of formation, as well as specific conditions of the procedure for recognition of study results achieved in previous education or professional experience are established in the [Regulations on Crediting Study Results and Resuming Studies at Subsequent Study Stages](#).

In order to begin recognition of learning outcomes achieved, the following should be submitted to the commission: application; documents certifying the learning outcomes achieved in the previous education or professional experience; payment order from the bank proving the payment made.

Enclosed:

Annex 24.1. Model diploma and supplement thereto.

Annex 24.8. Sample study contract.

[1] The Association of Schools of Public Health in the European Region (ASPHER). <http://www.aspher.org/>

[2] Birt, C., Foldspang, A. (2011). *ASPHER'S European public health core competences programme: philosophy, process and vision*.

[3] The outcomes of the study programme have been developed in accordance with the description of level 7 Latvian learning outcomes.

[4] Regulations of the Cabinet of Ministers No.846 "Regulations Regarding the Requirements, Criteria and Procedures for Admission to Study Programmes". 10.10.2006 <https://likumi.lv/ta/id/146637-noteikumi-par-prasibam-kriterijiem-un-kartibu-uznemsanai-studiju-programmas> (in English – [here](#)).

[5] Cabinet Regulations No. 505 "Regulations on Recognition of Competence Acquired Outside Formal Education or in Professional Experience and of Learning Outcomes Achieved in Prior Education". 14.08.2018 <https://likumi.lv/ta/id/301013-arpus-formalas-izglitibas-apguto-vai-profesionalaja-pieredze-ieguto-kompetencu-un-iepriekseja-izglitiba-sasniegumu-studiju-rezultatu-atzisanas-noteikumi>

### **3.1.3. Economic and/ or social substantiation of the study programme, analysis of graduates' employment.**

Priorities of the academic Master's study programme "Public Health" are health, promoting it at the level of the population as a whole, including improving physical, mental and social well-being by

identifying risk factors for both the environment and population and specific population groups through the development and implementation of evidence-based interventions. This approach is highlighted as the leading one in disease prevention and health promotion sectors in Latvia, also in the future, – it is widely described in the action lines of Public Health Guidelines 2021-2027 issued by the Ministry of Health of the Republic of Latvia. Based on this strategic document and local government structural reforms in Latvia, Latvia keeps strengthening the role of municipalities in health promotion, where increasing the number and capacity of human resources is a pressing matter.

Human resources are also highlighted in the European Union strategic framework on health and safety at work 2021-2027 Occupational safety and health in a changing world of work.<sup>[1]</sup> It marks a healthy workforce as the basis for Europe's strong and sustainable economy and societal development. Promoting healthy lifestyle in employees at workplace can significantly reduce the incidence of absenteeism, acute and chronic illnesses, reduce burnout and improve mental health. The document highlights the need to expand public health activity at workplaces, identify and prevent health risks in a timely manner, conduct data analysis and educate employees. The requirements of the abovementioned document are also incorporated in the policy planning documents of the labour protection field of Latvia. This highlights the prospectively growing need for professionals in public health at different workplaces.

The need for public health professionals with analytical skills, especially in the processing, analysis and forecasting of epidemiological data, as one of the learning outcomes of aims of the Master's study programme, was also demonstrated by the Covid-19 pandemic. From this aspect, the academic Master's study programme provides a good support for implementation of policy in long-term both on national and European Union level.

Academic Master's study programme Public Health is developed in compliance with CR No. 240 "Regulations on State Academic Education Standard". Paragraph 20 provides that the compulsory part of the Master's study programme, except for elaboration of the Master's thesis, shall include the study of theoretical knowledge of the chosen field of the scientific discipline or subdiscipline and the approbation of theoretical knowledge in the aspect of current problems of the chosen field of the scientific discipline or subdiscipline in the amount of no less than 24 credit points, if the volume of the Master's study programme is 80 credit points. Similarly, in the study process, master students acquire in-depth theoretical knowledge and develop skills in research in public health science, as well as are prepared for independent scientific research activity in various subdisciplines of public health.<sup>[2]</sup>

Public health education at the RSU provides for **continuity of levels of studies** in compliance with the Bologna process, i.e., graduates of bachelor's study programme may continue with master studies, those who have a Master's degree – with doctoral studies.

The planned outcomes of the study programme and the study courses implemented within it have been defined in the form of knowledge, skills and competencies, based on Latvian learning outcomes level descriptions (level 7) which comply with the **European learning outcomes level descriptions**.

**Recommendations on public health education<sup>[3]</sup> issued by the Association of Schools of Public Health in the European Region (ASPHER<sup>[4]</sup>)** have been taken into account during development of content of the study programme, its organisation, implementation and definition of learning outcomes, since RSU Faculty of Public Health and Social Welfare is a full member of ASPHER. ASPHER was founded in 1966, and at the moment more than 120 institutional members representing different study programmes in public health of EU Member States are operating in it. ASPHER is the leading European organisation aimed at strengthening the public health education,

harmonisation of study programmes in the joint European territory, connect educational competencies and practice, as well as promote research.

Purpose of the European Public Health Core Competencies developed by ASPHER: to promote a better and more unified understanding of the public health, as well as work and functions of a public health specialist; to facilitate a dialogue between teaching staff and employers; to improve the quality of study programmes, increase their conformity with labour market needs; follow the latest trends in public health needs and introduce them in the study programmes in a timely manner. Participation of RSU Faculty of Public Health and Social Welfare in ASPHER ensures exchange of information on a regular basis and permanent cooperation among EU Member State public health schools. Every year, ASPHER organises conferences where members of the organisation as well as leading specialists discuss the most important novelties in the public health education.

Conformity of the study programme to the demand of the labour market is validated by annual results of **surveys of employers and graduates**. Newly admitted master students and graduates of the academic Master's study programme complete a survey on their involvement in the labour market. The analysis of the situation shows that every year around 50-80% of Master students already work during studies in the field of public health, including in leading institutions: Centre for Disease Prevention and Control, Health Inspectorate, Ministry of Health, National Health Service, etc.

The [Public Health Association of Latvia](#) follows up the labour market demand in public health (the website is available only in Latvian). Graduates of public health study programmes are employed not only in state administration institutions, such as the Centre for Disease Prevention and Control, the Health Inspectorate, the Ministry of Health, the National Health Service, the Food and Veterinary Service, the Ministry of Welfare, but also in local governments, various companies, medical treatment institutions, pharmaceutical companies, provision of medical equipment, health insurance, sports and fitness, health profile educational institutions, clinical research companies, non-governmental organisations, etc.

The most popular public health areas of employment of graduates were health promotion, health care management, policy and health economics; public health research; protection of working environment and safety at work; environmental health; food safety monitoring; control of infectious diseases. The best graduates also make their professional careers in the academic environment, working both at RSU and at the University of Latvia and other educational and research institutions in Latvia and Europe.

**Employer survey results.** Employers are involved both in the quality council and in state examination commissions of public health study programmes, thus feedback is obtained annually through discussions regarding the job duties of master students and the competences they need, evaluating study programmes, the quality of individual courses and the necessary changes in content. In general, employers appreciate the inclusion of master students in the labour market. Their main findings are that graduates have good theoretical and practical preparedness for work in public health practice and science, that graduates are motivated to work, that they have good self-learning skills and new knowledge learning skills, good proficiency in foreign languages, they fit well into the team, quickly learn the specifics of work required for a position, take responsibility.

A **survey of employers** was conducted in 2022 in cooperation with the Public Health Association of Latvia (questionnaire is attached in Annex 12). Employers value the ability of programme graduates to fit well into their job responsibilities. Several have started their professional careers as Bachelors and continue with master studies while working. It is also emphasised that the ability to fit into the performance of the duties depends on each individual. Employers are satisfied with

graduates' theoretical knowledge and practical skills, motivation, ability to solve problems independently and responsibility, their satisfaction with innovative thinking is average.

Studies in a Master's study programme clearly complement all of these aspects, but the key aspects are the personality, personal qualities and motivation of the employee.

When selecting employees, employers would generally prefer an applicant with a Master's degree in employee selection. It is noted that Master students have better theoretical knowledge and practical work skills, as well as higher motivation, innovative thinking and ability to solve problems independently. Employees with a Master's degree perform their duties more independently, are more entrepreneurial, and can work with different resources (National Health Service). Exceptions exist for certain jobs, for example, the Health Inspectorate notes that Bachelor level education is sufficient for an inspector's position.

Employers note that several employees have started their professional careers as Bachelors and, in parallel with their work, continue their with Master studies, that work experience improves performance quality.

It is observed that after Master studies, analytical abilities increase, skills in working with statistical programmes, understanding of research methodology and practical implementation improve, ability to work in a team and take responsibility, solving problems and adapting to changes on their own increases (Centre for Disease Prevention and Control), that the positive impact of Master studies on the performance of the employee is definitely felt in terms of theoretical knowledge and the breadth of thinking (non-governmental organisations).

When asked how the employer evaluates the possibilities of a public health professional as a profession in the Latvian labour market, it is indicated that it is positive, because there is supply of jobs in state, local government and non-governmental sectors. In the public sector, public health professionals will be and are needed every year. This statement is confirmed by the fact that 3<sup>rd</sup>-4<sup>th</sup> year students of the Bachelor's study programme are currently able to take up their professional jobs and potential employers are fighting for the best graduates. It is noted that new public health professionals will also be needed in local governments to work in the field of health promotion. A relatively small number are still employed in business, such as organising and conducting various activities related to improving health literacy, lectures, seminars.

**Students surveys.** In accordance with the procedure defined by RSU – Process Description No. 22 "Surveys" (see Annex No. 1 "List of Internal Regulations") for each study course in the e-studies, all students complete a study course evaluation questionnaire, where they can express their opinion and proposals both regarding the content of the study course and its implementation methods, competences and work style of lecturers. The assessment of the study programme as a whole is provided when studies are over: a survey on the study programme is completed.

Overall, individual responsiveness of students in assessing individual courses and programmes in a centralised way has been low for years. Therefore, lecturers are use the possibility to receive feedback from student during talks after the end of the course. During the analysed period of time, an average of 20-47% provided a study course assessment. The responsiveness to assessment of individual courses was particularly low during the pandemic, when studies were remote. The average study course assessment is comparatively high. It is 3.45 to 3.83 on a four-point scale.

Only one third of graduates have provided an overall assessment of the study programme. The activity in different years is different. It was the lowest during the Covid-19 pandemic, when only ~20% completed the questionnaire. Therefore a parallel assessment of the study programme and its improvement is obtained through the Public Health Association of Latvia.

When analysing the academic Master's study programme "Public Health", convincingly all respondents are fully satisfied or mainly satisfied with their choice of the university (except one graduate). Most of respondents (92%) also positively assess their choice of the study programme. And again, only one student is an exception. The graduates are positive, but still evaluate more critically satisfaction with learning outcomes achieved. 62% gave the highest assessment (or fully satisfied), but 33% chose that they were "more satisfied", and only one student chose the option "more dissatisfied".

[1] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. EU strategic framework on health and safety at work 2021-2027. Occupational safety and health in a changing world of work. <https://eur-lex.europa.eu/legal-content/LV/TXT/?uri=CELEX:52021DC0323>

[2] <https://likumi.lv/ta/id/266187-noteikumi-par-valsts-akademiskas-izglitiba-standartu>

[3] Birt, C., Foldspang, A. (2011). ASPHER'S European public health core competences programme: philosophy, process and vision.

[4] The Association of Schools of Public Health in the European Region (ASPHER). <http://www.aspher.org/>

**3.1.4. Statistical data on the students of the respective study programme, the dynamics of the number of the students, and the factors affecting the changes to the number of the students. The analysis shall be broken down into different study forms, types, and languages.**

10 state budget funded study places are granted to the academic Master's study programme "Public Health" every year. 1.7 to 2.3 applicants participate in the admission competition per year. The programme was implemented both in Latvian and in English in the academic years 2018/2019, 2019/2020 and 2020/2021. International students represented third countries – India, China, Pakistan, Sri Lanka, and only one student in one year of studies was from Romania.

Overall, 63 students were enrolled and 44 students or 70% successfully graduated in the time period being analysed after the previous graduation of the study programme. The highest drop-outs of students (80% of all) is observed in the first year of studies. The highest number of students studying in English was in the 2019/2020 academic year (10 students), and this was the only academic year in which there were drop-outs among international students (6 students). The main reasons for dropping out are poor academic performance and withdrawal in equal proportions. The main problems are the inability to combine studies and work, and therefore students choose to work, as this is a prerequisite for maintaining material well-being and living standards. The majority return to the study programme after the academic leave. Meanwhile, among students who withdrew from studies in recent years during the Covid-19 pandemic, the large increase in work at their workplace was often named as a reason. Individual students withdraw from their studies because they did not expect that learning the programme content would require so much time, or personal exhibits were not centred on the evidence-based aspect in the content of their study courses. On the other hand, the reason for expulsion in the second year of studies was not delivering a Master's thesis on time; a year later, two students delivered and successfully defended it.

During the period analysed, Master students did not use Erasmus study mobility. As the main reason for this, students indicate material and social responsibility for their family, as well as employment, i.e. unwillingness to lose their job and lack of employer's support. One of the foreign graduates of the Master's programme, on the other hand, used Erasmus graduate placement mobility in 2021/2022, working seven months for the Lisbon Project Association, Portugal.

Enclosed:

Annex 16. Statistical data on students.

### **3.1.5. Substantiation of the development of the joint study programme and description and evaluation of the choice of partner universities, including information on the development and implementation of the joint study programme (if applicable).**

Not applicable.

## **3.2. The Content of Studies and Implementation Thereof**

### **3.2.1. Analysis of the content of the study programme. Assessment of the interrelation between the information included in the study courses/ modules, the intended learning outcomes, the set aims and other indicators with the aims of the study course/ module and the aims and intended outcomes of the study programme. Assessment of the relevance of the content of the study courses/ modules and compliance with the needs of the relevant industry, labour market and with the trends in science on how and whether the content of the study courses/ modules is updated in line with the development trends of the relevant industry, labour market, and science.**

The strategic aim of the study programme is to provide students with theoretical knowledge on public health sciences, as well as skills in specific theoretical and methodological issues of research in the sector to promote evidence-based decision-making and finding solutions in practice. Consequently, the learning outcomes are achieved which conform to the knowledge, skills and competence defined in level 7 of the European Qualifications Framework (EQF) specified in the Latvian Education Classification.

Six achievable learning outcomes have been determined for the programme, which determine that as a result of mastering the programme the graduate has the following competences:

1. Critical understanding of public health concepts and theories. This implies that the graduate has acquired a systematic and critical understanding of the concepts of public health and public health theories and is able to use those concepts and theories in the substantiation of research and/or practical activities in different areas of public health. Theoretical aspects of public health are addressed in study courses such as "Theory of Public Health" (4 CP/6 ECTS), "Health Promotion Policy and Practice" (4 CP/6 ECTS), "Environment, Occupational Health

and Occupational Medicine" (2 CP/3 ECTS), "Health Care Management" (4 CP/6 ECTS), "Health System Design" (2 CP/3 ECTS), "Global Problems in Public Health" (2 CP/3 ECTS), "Health Care Economics" (2 CP/3 ECTS), Epidemiology I (2 CP/3 ECTS) and Epidemiology II (6 CP/9 ECTS).

2. Knows multi-faceted research of public health problems and develops appropriate multisectoral solutions. It implies that the graduate is aware (knows) the multi-factor origin of public health problems, is oriented towards multifaceted research of public health problems and is able to develop multisectoral solutions appropriate to these problems, working in cross-sectoral teams and integrating knowledge from different fields where necessary. Research aspects and looking for evidence-based solutions are covered in courses such as "Global Problems in Public Health" (2 CP/3 ECTS), "Epidemiology I" (2 CP/3 ECTS) and "Epidemiology II" (6 CP/9 ECTS), "Register-based Research" (2 CP/3 ECTS), "Health Promotion Policy and Practice" (4 CP/6 ECTS), "Environment, Occupational Health and Occupational Medicine" (2 CP/3 ECTS), "Health Care Economics" (2 CP/3 ECTS), "Health Care Management" (4 CP/6 ECTS), "Intercultural Communication and Research Methods" (2 CP/3 ECTS), "Research Methodology" (6 CP/9 ECTS), "Qualitative Research Methods" (6 CP/9 ECTS), "Vertical Integration Project Ergonomic Workplaces in a Healthy Environment" (2 CP/3 ECTS), as well as developed practically, when writing a Master's thesis.
3. Prepared for independent research activities. This means that the graduate has been prepared for independent research activities in both local and international scientific projects and prepared for doctoral level studies. Uses the evidence-based public health perspective in his or her research and practical activities. Is able to offer new knowledge in public health as a result of his or her research activities. The student masters the preparation for practical research activities in study courses such as "Research Methodology" (6 CP/9 ECTS), "Qualitative Research Methods" (6 CP/9 ECTS), "Mathematical Statistics I" (2 CP/3 ECTS) and "Mathematical Statistics II" (6 CP/9 ECTS), "Epidemiology I" (2 CP/3 ECTS) and "Epidemiology II" (6 CP/9 ECTS), "Development and Adaptation of Questionnaires in Scientific Research Work" (2 CP/3 ECTS), "Project Management" (2 CP/3 ECTS), "Vertical Integration Project Ergonomic Workplaces in a Healthy Environment" (2 CP/3 ECTS), as well as by writing independently under supervision of a thesis supervisor and defending a Master's thesis.
4. Communicates scientific information substantiating his or her opinion with scientific arguments. The outcome provides that the graduate is able to communicate scientific information in multimodal and digital ways to both the audience of professionals and the general public regarding the current public health issues, as well as is able to substantiate his or her opinion using scientific means (arguments). The achievement of this outcome is supported by study courses such as "Intercultural Communication and Research Methods" (2 CP/3 ECTS), "Health Literacy" (2 CP/3 ECTS), "Communication and Public Relations" (2 CP/3 ECTS), "Research Methodology" (6 CP/9 ECTS), "Health Promotion Policy and Practice" (4 CP/6 ECTS), "Management of Epidemiological Emergencies" (2 CP/3 ECTS), as well as skills are demonstrated when defending a Master's thesis.
5. Fosters the implementation of innovation in practice and research. The outcome provides that the graduate understands the dynamics (variability) of public health as a science and practice, follows up on current theoretical and technological innovations of public health and is able to integrate them into the research and resolution of routine and current (acute) public health problems. Students take the following courses to achieve this outcome: "Health Care Economics" (2 CP/3 ECTS), "Health Care Management" (4 CP/6 ECTS), "Health Promotion Policy and Practice" (4 CP/6 ECTS), "Environment, Occupational Health and Occupational Medicine" (2 CP/3 ECTS), "Management of Epidemiological Emergencies" (2 CP/3 ECTS), "Health System Design" (2 CP/3 ECTS), "Management of Epidemiological Emergencies" (2 CP/3 ECTS), "Communication and Public Relations" (2 CP/3 ECTS).

6. Following ethical and legal principles in various public health areas. It implies that in performing his or her professional activities in public health science and practice, the graduate knows legal principles and observes all necessary ethical principles, as well as avoids causing any possible harm to human health. The achievement of this outcome is supported by study courses such as “Professional Ethics” (2 CP/3 ECTS), “Law in Medicine” (2 CP/3 ECTS), “Research Methodology” (6 CP/9 ECTS), “Theory of Public Health” (4 CP/6 ECTS), “Civil and Environmental Protection, First Aid” (2 CP/3 ECTS), “Health Care Management” (4 CP/6 ECTS), “Health Promotion Policy and Practice” (4 CP/6 ECTS), “Environment, Occupational Health and Occupational Medicine” (2 CP/3 ECTS), “Project Management” (2 CP/3 ECTS), as well as an independently written and defended Master’s thesis.

Overall, it must be concluded that to achieve each of the outcomes defined, the programme offers a number of study courses and that the master student should learn them successfully. Their content is developed by heads of study courses approved at the meeting of the Department of Public Health and Epidemiology. The content is discussed at meetings of the Public Health Quality Council, which also includes employers, industry experts and students. At the beginning of each new year of studies (semester), the head of the study course updates the content of the course, supplements it with the latest and most up-to-date information, which conforms to both current developments in the sector, labour market needs and trends in public health science. Supplements are integrated both in the study course description and in the materials placed in e-studies for independent study.

The content of programme is implemented as full-time studies of two years of studies (four semesters) and the total volume is 80 CP (120 ECTS). In accordance with the RSU study description No. 35 “Organisation of Study Process”, a form D-1 “Curriculum of the Study Programme for the Academic Year” was developed and the study work is planned in compliance with it.

Study programme consists of compulsory and compulsory elective study courses, as well as master’s thesis.

**Table 2. Basic parts of the study programme in academic year 2022/2023**

Study courses	Volume in Latvian credit points (CP)	ECTS credit points
Compulsory study courses (category A)	42	63
Compulsory elective study courses (Category B)	30 (here student selects study courses with the total volume of 18 CP)	45 (here student selects study courses with the total volume of 27 credit points)
Master’s thesis (category A)	20	30
Total	80	120

The compulsory content of studies in the volume of 62 CP/93 ECTS (77.5% of the total credit points) includes both researching broad theoretical views in public health area and their approbation, when writing a Master’s thesis on a pressing public health problem. The outline of the study programme provides that majority of compulsory study courses are taught during the first study year, while students may choose several compulsory elective study courses during the fall semester of the second study year. The spring semester of the second year of studies is devoted to wiring and defence of a Master’s thesis. A Master’s thesis is a research paper in a public health science or any of its sub-fields, when the candidate to the Master’s degree candidate demonstrates his/her abilities on all stages of scientific research, starting from the study planning and up to the presentation of



results.

**Table 3. Planning of study programmes by years of studies in the academic year 2022/2023**

<b>Study year</b>	<b>Study courses taught, their areas</b>
<b>Year of studies I</b>	<p>Category A (compulsory) study courses aimed at providing theoretical and practical knowledge for research in public health sphere: Theory of Public Health; Epidemiology (II); Research Methodology; Qualitative Research Methods; Mathematical Statistics (II); Global Problems in Public Health; Health Care Economics.</p> <p>Category B (compulsory elective) study courses: Health Literacy; Epidemiology (I); Mathematical Statistics (I); Intercultural Communication and Research Methods; Vertical Integration Project "Ergonomic Workplaces in a Healthy Environment"; Development and Adaptation of Questionnaires in Scientific Research Work; Civil and Environmental Protection, First Aid; Health System Design</p>
<b>Year of studies II</b>	<p>Category A (compulsory) study courses: Health Care Management; Health Promotion Policy; Professional Ethics; Master's thesis.</p> <p>Category B (compulsory elective) study courses aimed at providing in-depth knowledge in various topical public health areas: Law in Medicine, Environment, Occupational Health and Occupational Medicine; Communication and Public Relations; Management of Epidemiological Emergencies; Project Management; Register-based Research</p>

The course of study programme is organised in accordance with the needs for in-depth and specific knowledge in public health science and practical activity areas. The curriculum of study programmes is reviewed on a regular basis in accordance with labour market needs and industry development. Several new study courses have been created and offered since previous accreditation study programme: "Development and Adaptation of Questionnaires in Scientific Research Work", "Civil and Environmental Protection, First Aid" Health System Design" and Vertical Integration Project "Ergonomic Workplaces in a Healthy Environment". They were created in cooperation with other Master's study programme of the Faculty of Public Health and Welfare, thus emphasising the need for interprofessional cooperation and team work in research and practice. The research capacity of Master level students, involvement in scientific projects and continuation of studies at doctoral level.

Work is currently ongoing on three new elective study courses and one of them will be "Evidence-Based Prevention of Use of Addictive Substances". This course is developed on the recommendation of the Ministry of Health and Centre for Disease Prevention and Control, so that in future more graduates can be involved in the implementation of addiction prevention work and reduction of addiction problem in Latvia. The second course "Health Literacy" will replace the previously implemented course in health pedagogy and give a more focused look at the concept of health literacy, its research methods, as well as approaches to changes in public health literacy. Meanwhile, the creator of the third study course is the US Fulbright Scholarship recipient, an economics expert from the United States Uģis Sprūdžs, and the course will be about using big data in time series analysis and modelling. The need for modelling knowledge in public health was raised during the Covid-19 pandemic, when modelling of the epidemiological situation was essential in decision-making. This necessitated the need to seek an external expert to create both course

content and course materials and prepare lecturers of the department. These elective courses are planned to be offered to master students from year 2023/2024. Starting with the new academic year, the study programme plans to reduce the amount of compulsory elective (B) courses by 6 ECTS and to offer free elective (C) courses (see Annex 19).

Enclosed:

Annex 17.1. Compliance of the study programme with the national educational standard.

Annex 18.1. Mapping of the study courses for the achievement of learning outcomes of the study programme.

Annex 19. Planning of the study programme (for each type and form of the implementation of the study programme).

Annex 20. Description of study courses.

**3.2.2. In the case of master's and doctoral study programmes, specify and provide the justification as to whether the degrees are awarded in view of the developments and findings in the field of science or artistic creation. In the case of a doctoral study programme, provide a description of the main research roadmaps and the impact of the study programme on research and other education levels (if applicable).**

The Master's study programme "Public Health" ends with a final examination – writing and defence of a Master's thesis.

In accordance with the Law on Higher Education Institutions, an academic degree is awarded after mastering an academic study programme. Upon completion of the Academic Master's study programme "Public Health" the graduate is awarded the degree of a Master of Health Sciences in Health Care.

In accordance with the Law on Scientific Activity and CM Regulations No. 49 "On Latvian Branches and Sub-Branched of Science", public health belongs to the field of science "Health and sport sciences".

To obtain the degree, the master student should learn the theoretical part of the programme of 60 CP/90 ECTS and should independently write and defend a Master's thesis (20 CP / 30 ECTS). The themes of Master's theses should correspond to the thematic areas approved at the Council of the Faculty of Public Health and Social Welfare: risk factors for individual diseases (health events) in the population, preventive activity in society, health-related lifestyle habits and their determinants in different population groups, health policy and system functioning, risks to the environment, including working environment (see section 3.2.4 for additional information).

Thematic priorities are broadly in line with the priorities set out in the Public Health Guidelines 2021-2027: healthy and active lifestyles, reducing disease spreading, access to services, public engagement.

**3.2.3. Assessment of the study programme including the study course/ module implementation methods by indicating what the methods are, and how they contribute to the achievement of the learning outcomes of the study courses and the aims of the study programme. In the case of a joint study programme, or in case the study programme is implemented in a foreign language or in the form of distance learning, describe in detail the methods used to deliver such a study programme. Provide an explanation of how the student-centred principles are taken into account in the implementation of the study process.**

Several study methods are used by lecturers in work with students in the practical implementation of study programme, which have been selected to generally foster the achievement of aims of separate courses and the programme.

- **Interactive lectures (including discussions).** They are aimed at involving students in active learning, participation in identification of the topical public health issues, analysing them and offering a solution, discuss the research opportunities in public health area, understand in depth the role of evidence-based decisions in public health policy and practice.
- **Classes, seminars (including case analyses).** More complex subjects are discussed in seminars and classes, including training practical skills. Case analysis method is crucial in public health education, since it helps develop critical thinking and train analytical skills. During a case analysis, different topical public health problem situations are reviewed and students are taught to look for complex solutions when researching a particular public health problem, for example, develop a conceptual research model, suggest the optimal approach to a health promotion programme, process complicated statistical data, perform case analysis in health care (medical) law and professional ethics, etc.
- **Small group work** (3- 4 persons per group). It is used to improve the communication and dialogue making skills, to define an opinion and express it clearly when analysing various problem situations and cases, to master and strengthen skills of working on a team, cooperate.
- **Students' independent work.** It amounts to 70% of the total study volume. Form, organisation and test of student's independent work forms are determined and monitored by study course supervisor and the involved lecturers. Types of independent work: reasoned essay on a public health issue; a detailed development of conceptual research model; gathering and analysing scientific literature; analysing scientific publications; solving epidemiological and statistical tasks; evaluating health promotion intervention; analysing and comparing public health policy in accordance with recommendations of European, World Health Organization and other international organisations; writing and preparing a report, etc. Study materials for improvement of students' independent work are placed in the e-learning environment. Student's independent work is assessed and the score is included in the total study course assessment received at the end of the study course. Detailed assessment principles are described in each study course description.
- **Studying on e-platform.** On the e-platform (*Moodle*), students both receive lecture materials and texts used in the particular study course and create and submit their independent papers devoted to analysis of specific public health issues.
- **Studying on the Zoom** Under the conditions of restrictions during the Covid-19 pandemic, regular classes were replaced with remote classes. The ability of the software used to create discussions in groups, set priorities and vote in Mentimeter, perform mapping, etc. Based on surveys of students, remote classes in the amount of 30-50% on average (depending on the

course) are also maintained at present. This makes it easier for working master students to combine work with studies and save travel time, because not all master students live in Riga.

### Information on assessment system

Assessment of students' achievements is based on the following principles:

- **transparency of knowledge and skills assessment** – at the beginning of the study course, information is made available on the set of requirements to be fulfilled in order to receive a positive assessment;
- **principle of mandatory assessment** – student must receive positive assessment on learning the / content of the course/programme, at least “almost good” (4 points);
- **variety of tests** – different types of tests are used in the study programme to assess the learning outcomes. These may include both written tests, tasks, analysis of a situation, projects, individual and group presentations, etc., and their description is given in the study course guidebooks;
- **conformity** – students shall have the opportunity to demonstrate their analytical, creative, and research abilities, as well as ability to apply the learned skills during a test. Requirements for exams and tests are set by the study course supervisor, and approved in a session of the particular academic unit.

### Student learning outcomes are assessed as follows:

- **during a semester**, students' knowledge is tested and assessed based on the results of individual study work using assessment methods such as test work, knowledge tests, reports, essays, development and presentation of research projects, etc. Independent work should be submitted and examined in e-studies so that it possible, for example, to check whether the submitted report or essay is not plagiarism or to see the correct response and error rate when completing a test;
- **Participation and quality of work** during lectures, seminars and practical classes is also crucial. Test types motivate the students to work regularly and systematically, and make it possible for the lecturer to establish the course material learning level;
- **Examinations after completed study course**. After completed study course, student learning outcomes are assessed in either exam or test. The final assessment of study course may include assessment of the student's work during entire course, i.e., form a cumulative assessment;
- **after completing the study programme** student writes and defends a master's thesis as an individual research paper in public health science. Master's thesis is assessed both by the reviewer and the master's thesis assessment commission.

At the end of each study course, the student must receive an assessment thus confirming the level of achievement of learning outcomes. Study course supervisors develop an examination assessment algorithm approved in the session of the relevant academic unit. Same assessment algorithm is applied to all students. Assessment methods must correspond to study course content and be able to measure the learning outcomes. The form M-3 “Study Course Guidebook” contains the planned study course outcomes, as well as assessment criteria and test types.

Student may submit an appeal if he/she disagrees the given assessment<sup>[1]</sup> and/or file a complaint<sup>[2]</sup> regarding assessment methods.

<sup>[1]</sup> Rīga Stradiņš University Academic Regulations I, Paragraph 9 “Lodging and Considering Appeals”.

[2] Process Description No. 31 "Receipt and handling of complaints and suggestions, activities aimed at improving management system.

**3.2.4. If the study programme envisages an internship, describe the internship opportunities offered to students, provision and work organization, including whether the higher education institution/ college helps students to find an internship place. If the study programme is implemented in a foreign language, provide information on how internship opportunities are provided in a foreign language, including for foreign students. To provide analysis and evaluation of the connection of the tasks set for students during the internship included in the study programme with the learning outcomes of the study programme (if applicable).**

Not applicable.

**3.2.5. Evaluation and description of the promotion opportunities and the promotion process provided to the students of the doctoral study programme (if applicable).**

Not applicable.

**3.2.6. Analysis and assessment of the topics of the final theses of the students, their relevance in the respective field, including the labour market, and the marks of the final theses.**

***Information on whether the theses and other indicators confirm that the learning outcomes are achieved.***

Writing and defending a Master's thesis is a compulsory final examination of the academic Master's study programme "Public Health", which certifies the theoretical knowledge of a candidate for a Master's degree in public health, and skills to perform research work independently at all its stages.

The procedure of writing, submission and defence of a Master's thesis is laid down in the "Regulations on Writing and Defence of Qualification Paper, Student's Research Paper, Bachelor's Thesis and Master's Thesis", "Procedure for Submission and Storage of Electronic Versions of Student Qualification Papers, Bachelor's Theses and Master's Theses or other Final Papers in RSU Open Access Institutional E-Resource Repository" of Rīga Stradiņš University, as well as Rīga Stradiņš University Academic Regulations I. These documents are available electronically on the RSU website (<http://www.rsu.lv/par-rsu/normativie-akti-un-dokumenti>) in Latvian and in English.

In the third semester, master students prepare an application for the topic of their Master's thesis, which is coordinated with the thesis supervisor. The topic of the Master's thesis should be in line with the thematic areas previously approved by the Council of the Faculty of Public Health and Social Welfare. In turn, thematic areas are reviewed, supplemented and approved annually by the

quality council of the study programmes “Public Health”. The themes reflect developments in the field of public health, both internationally and nationally. Recommendations for research are also received from employers and industry experts as their representatives are on the quality board of the study programme “Public Health” and are involved in the process of preparing and defending Master’s theses.

The applied topics of Master’s theses is examined and approved by the quality council of the study programme “Public Health” and the Faculty Council. Databases of institutions subordinated to the Ministry of Health (such as the National Health Service, Centre for Disease Prevention and Control, the Health Inspectorate, the Emergency Medical Assistance Service, etc.) are widely used in writing a Master’s thesis. The topics of theses are diverse and cover both the analysis of individual diseases and their risk factors, preventive activity in society, health-related lifestyle problems in different population groups, the functioning of the health system, and risks to the working environment, thus covering all key areas of public health. The institutions that have provided master students with the data also want to familiarise themselves with the results of the Master’s thesis.

A Master’s thesis is written and defended in the fourth semester. Master’s theses are assessed taking into account the current relevance of the selected research problem and the ability of the master student to perform scientific work independently: formulate and update the problem, summarise scientific literature, develop a conceptual model of research, identify the research matter, aim and tasks, choose the most appropriate type of data and research design, obtain data and perform their statistical processing, reflect and analyse results, draw conclusions, present their own assessment and present results both in academic form and during presentations. Therefore, during defence the master student demonstrates skills in identifying and substantiating public health problems, demonstrates awareness of the multi-factor origin of public health problems and confirms with results the need for evidence-based, often multisectoral, solutions to mitigate the problem. Since many master students are already employed in public health, they often write their Master’s thesis on a topic that could provide further clarification and help to find a solution to the challenges they face on a daily basis.

From academic year 2016/2017 to 2021/2022, 54 students defended their Master’s thesis, of which 7 were international students. Topics of Master’s theses reflect the breadth of the field of public health. Problems related to health have been studied in different age groups of the population (adolescents, adult residents of Latvia, elderly), also in specific populations, (problem drug users, HIV/AIDS patients, cancer patients, pregnant women, etc.). All sorts of problems have been covered, such as medication compliance, risky behaviour, response to vaccination and screening and factors affecting it, health-related habits (nutrition, physical activity, smoking, drinking alcohol), health self-assessment, mental health (depression, stress, psychoemotional disorders, suicidal behaviour), inequalities in receiving health services, survival rate in case of different forms of cancer, and other current public health problems have also been explored. Details of the topics can be studies in Annex 22.

The Master’s thesis were generally written in good quality. The average assessment of the period in Latvian language study groups was 8, among international students – 5.8. 38.9% of defended Master’s thesis (in the Latvian language flow – 44.7%) received an assessment “excellent” and “with distinction”. 40.8% of master students received an assessment “very good” and “good”: 40.4% in the Latvian language flow and 42.9% among international students. Only six master students defending their Master’s thesis received an assessment “satisfactory”, three of them were international students.

Enclosed:

### 3.3. Resources and Provision of the Study Programme

#### 3.3.1. Assessment of the compliance of the resources and provision (study provision, scientific support (if applicable), informative provision (including libraries), material and technical provision, and financial provision) with the conditions for the implementation of the study programme and the learning outcomes to be achieved by providing the respective examples.

The study process for master students mainly takes place at the Department of Public Health and Epidemiology (Kronvalda bulvāris 9), premises at Dzirciema iela 16 and Anniņmuižas bulvāris 26a are used for the implementation of individual courses. Study premises are modern, equipped with computers and an interactive board. Free internet, as well as publicly available computers with internet connection, are available in premises of the higher education institution. Drinking water is available in common use premises, recreation areas have coffee and drink vending machines, cafeterias ensure catering at individual RSU buildings. Students can download *MsOffice* and *SPSS* (*Statistical Package for the Social Sciences*) software free of charge on their personal computers for study work. Resources of the RSU Library are available for study needs on site and remotely.

For independent studies, various learning resources are placed in e-studies, including study course descriptions, presentations, thematic summaries, tasks, tests, if any, as well as mandatory readings. Educational literature is mostly provided through e-books and e-journals or by scanning key pieces of text and by placing in e-studies, as well as addresses of e-resources used for studies, thus providing students with extensive access to recommended readings.

The RSU Library provides lecturers and students with access to Latvian and international electronic resources. Premises of the RSU Library is also the World Health Organisation (WHO) Depositary Library in Latvia. The Depositary Library contains both printed and electronic materials – policy documents, recommendations, guidelines, expert reports on the assessment of the situation prepared by WHO on current public health problems around the world. For example, on HIV/AIDS global situation and its control, alcohol abuse, smoking, cardiovascular diseases, environment and society, mother and child health, oncological and infectious diseases, mental health, nutrition, food safety, water supply and sewage, and other health care, environmental health and medical social matters. These resources are very important for students in public health areas.

Funding for purchasing scientific literature is allocated in the annual budget of the Department of Public Health and Epidemiology (DPHE) every year, for example, every year DPHE subscribes to the “International Journal of Public Health” (*online* version) and the “American Journal of Epidemiology” (*online* version) from its budget. It should be noted that the funding specified in Table 4 is for all study programmes provided by DPHE: Bachelor's and Master's study programmes, however, this does not limit the use and added value of scientific literature for students of different study programmes.

**Table 4. Funding granted by the Department of Public Health and Epidemiology for purchasing of scientific literature**

<b>Year</b>	<b>2016.</b>	<b>2017.</b>	<b>2018.</b>	<b>2019.</b>	<b>2020.</b>	<b>2021.</b>	<b>2022.</b>
Financing (EUR)	2750	2750	2981	2728	2832	3016	1344

Lecturers of the Department of Public Health and Epidemiology have the opportunity to apply for any for the necessary editions by filling out the RSU form BK-1(5). Twice a calendar year, lists of scientific literature are drawn up and submitted to the RSU Library. Scientific and educational literature is purchased in a centralised way based on a submitted list. RSU is subscribed to a number of databases which also provide industry-relevant literature (e.g. *Scopus*, *Ebrary*, etc.).

The computers installed in the library can be used only for statistical processing of data of research papers in the *SPSS* software. To foster scientific activities of RSU students and lecturers, the Statistical Unit offers consultations on research methodologies, data input, the use of data processing programmes, methods of statistical processing of data, analysis, interpretation and graphic presentation of results.

At the beginning of the implementation of each study course, the head of the study course with support of the department study process coordinator supplements and updated materials in the e-learning environment. In order to improve the compliance of the library collection with the needs of students lists of study course readings are revised, there is cooperation between library staff and university lecturers to inform about the situation with supplies of study course literature and popularise e-resources, while users have the possibility to fill an electronic questionnaire for supplementing the library collection. The lecturer of the study course continues to work on the website during the implementation of the study course, using it also for communication with students, notices and answers to questions. To improve the e-environment and integrate it more into the study process, the Information Technology Department offers new tools and training for teaching staff.

The assembly restrictions imposed during the Covid-19 pandemic were a major challenge in adapting and ensuring the study process. Regular lectures and classes were suspended by rector's order from 11.03.2020. The study process was continued remotely through the e-learning environment and IT tool capabilities. The RSU provided and continues to provide regular training to all teaching staff on the use of different IT platforms and tools in remote studies. Lecturers have the opportunity to apply to IT specialists for individual consultations. During the pandemic, both the university management and the department organised informative meetings for students to explain the situation, inform about the progress of the study process and discuss possible scenarios for future development.

The Student Union coordinated and ensured the needs of first year students in relation to computer equipment, students also had the opportunity to apply for visiting the premises of RSU to participate in remote lectures and classes if they did not have such opportunities at home. Lecturers were also provided with computer equipment and cameras, there was an opportunity to read remote lectures and classes from RSU premises.

The RSU supports the further training and professional development of lecturers. Various courses and seminars for lecturers are organised and offered by the Centre for Educational Growth, the Doctoral School, the Information Technology Department, such as mastering of digital tools, the use of interactive methods, the preparation of scientific articles, information on various databases at the disposal of the library, creating references in the *EndNote* software, etc. In academic year 2021/2022, to respond to the rapidly changing study environment, the Centre for Educational Growth organises training on hybrid studies thus helping lecturers to understand the combined



study process, when lectures and classes should be read to those, who are in the auditorium, and to those, who study remotely.

RSU organises a Research Breakfast on a variety of research topics and invites lecturers, researchers, students, and other interested persons to participate. For example, to present the performance of RSU in the national research programme “Mitigating the consequences of Covid-19”, research data were presented and discussed at several Research Breakfasts in academic year 2020/2021. This event is not only informative, but also promotes mutual cooperation between professionals in different fields, joint generation of ideas and the involvement of students in research.

Taking care of mental and physical health of employees, RSU offers to attend the gym, and organised sports classes for lecturers at the Faculty of Continuing Education. During the Covid-19 pandemic, in cooperation with the Department of Psychosomatic Medicine and Psychotherapy employees and students were offered to receive consultations for the preservation and improvement of mental and physical health.

Enclosed:

Annex 23.2. Assessment of the informative and methodological provision regarding library resources for the implementation of the Public Health and Social Welfare Faculty study programmes in accordance with the requirements of the guidelines.

Annex 23.3. Assessment of the information and methodological base on IT resources.

**3.3.2. Assessment of the study provision and scientific base support, including the resources provided within the framework of cooperation with other science institutes and higher education institutions (applicable to doctoral study programmes) (if applicable).**

Not applicable.

**3.3.3. Indicate data on the available funding for the corresponding study programme, its funding sources and their use for the development of the study programme. Provide information on the costs per one student within this study programme, indicating the items included in the cost calculation and the percentage distribution of funding between the specified items. The minimum number of students in the study programme in order to ensure the profitability of the study programme (indicating separately the information on each language, type and form of the study programme implementation).**

The study programme is planned to be financed from state budget funds and the funds of individuals and legal entities setting the tuition fee in the Latvian flow in accordance with the state budget funding without social security of EUR 7335, in the English flow – EUR 7800 per year of studies. The tuition fee can be subject to discounts in accordance with internal norms and regulations. The number of students planned to be achieved in the Latvian flow in two years of studies is 23 students, enrolling 12 students in the first year, planning a drop-out of 1 student in the

second year. Such a number of students is optimal to ensure a high-quality study process and to make the study programme cover its implementation, as well as development costs. Meanwhile, the study programme in the English flow, which lasts two years, will be able to cover implementation and development costs, if a total of 23 students are enrolled, who pay a tuition fee of EUR 7800 per year.

The funding is used for staff remuneration, attraction of visiting university lecturers, taxes, maintenance of IT infrastructure, purchase of equipment and devices and study visit costs. In addition to the direct costs of the implementation of lectures and classes, the StP must cover the infrastructure maintenance costs (facilities, IT solutions) and other RSU common resources used in StP (Student Service, Library, organisation of the study process, grant for the Student Union and other support and administrative functions).

StP is implemented by RSU Faculty of Public Health and Welfare Department of Public Health and Epidemiology, Department of Welfare and Social Work and Department of Health Psychology and Pedagogy and Faculty of Medicine Department of Occupational and Environmental Medicine, Department of Clinical Skills and Medical Technologies and Statistical Unit. Remuneration of the academic staff in the first year in the Latvian flow of StP is planned to be approximately 32 thousand EUR and approximately 39 thousand EUR in the English flow study programme.

*Table 5. Information on student costs*

**Costs of the study programme in the Latvian flow**

<b>Name</b>	<b>Result</b>
Average income per student, EUR	7420
Average cost per student, EUR	5515
Academic staff, %	48
Department resources, %	3
Other direct expenditure, %	3
Scholarship costs, %	5
Fixed costs, %	4
Overheads, %	37

**Costs of the study programme in the English flow**

<b>Name</b>	<b>Result</b>
Average income per student, EUR	7800
Average cost per student, EUR	5755

Academic staff, %	56
Department resources, %	3
Fixed costs, %	4
Overheads, %	37

### 3.4. Teaching Staff

**3.4.1. Assessment of the compliance of the qualification of the teaching staff members (academic staff members, visiting professors, visiting associate professors, visiting docents, visiting lecturers, and visiting assistants) involved in the implementation of the study programme with the conditions for the implementation of the study programme and the provisions set out in the respective regulatory enactments. Provide information on how the qualification of the teaching staff members contributes to the achievement of the learning outcomes.**

Highly qualified teaching staff: professors, associate professors, assistant professors, as well as invited teachers, who are experts in the field of public health in Latvia are involved in the implementation of academic Master's study programme "Public Health". 25 lecturers are involved in the implementation of the study programme, who are both permanent RSU lecturers and industry professionals (for example, from the Centre for Disease Prevention and Control, the Emergency Medical Assistance Service, university clinics), leading researchers from the Institute of Public Health and the Institute of Occupational Safety and Environmental Health, as well as support staff.

13 of lecturers involved in the implementation of the study programme have been elected to RSU academic positions, including 4 professors, 1 associate professor, 6 assistant professors and 2 lecturers.

The composition of teaching staff in the study programme is stable, the majority are lecturers of the Department of Public Health and Epidemiology. Lecturers have both academic and practical work experience in the field of public health. In the reporting period, changes in academic staff have occurred among both permanent lecturers and invited teachers (for example, Kristīne Ozoliņa and Laura Isajeva, former experts of the Centre for Disease Prevention and Control became lecturers of the Department of Public Health and Epidemiology; in the course "Register-based Research", Assoc. Prof. Ieva Strēle was replaced by the Senior Data Analyst of the Centre for Disease Prevention and Control *Dr. med. Iriša Zīle*).

To promote the achievement of the aim of the study programme and learning outcomes, lecturers with extensive academic and professional experience are maximally involved in teaching of study courses.

- Study courses "Theory of Public Health", "Research Methodology", "Health Promotion Theory and Practice", as well as supervision of Master's theses – **Anita Villeruša**, Professor of the

Department of Public Health and Epidemiology, director of the Master's study programme "Public Health", chairperson of the Scientific Council, expert of the Latvian Council of Science, public health expert at several meetings at the Ministry of Health, Chairperson of the Board of the Public Health Association of Latvia, represents RSU at the Association of Schools of Public Health in the European Region, ASPHER). She is involved in research coordinated by the Centre for Disease Prevention and Control, for example, on the working group in the research of health habits of Latvian adults (since 1998) and in the international research of health habits of pupils (since 1994). She was a project manager at the *Interreg* project *Healthyboost R085* "Urban Labs for Better Health for All in the Baltic Sea Region – boosting cross-sectoral cooperation for health and wellbeing in the cities" (*Healthy Boost*), No. #R085 (2018–2021) and a sub-project manager at the national research programme for mitigating the consequences of the Covid-19 pandemic "Impact of COVID-19 on health care system and public health in Latvia; ways in preparing health sector for future epidemics" (2020–2021).

- Study course "Epidemiology II" and supervision of Master's theses – **Ģirts Briģis**, Professor of the Department of Public Health and Epidemiology, public health expert at the Ministry of Health and at the State Chancellery, members of working groups of the Latvian Ministry of Health, expert of the Latvian Council of Science, member of the RSU Scientific Council and Doctoral Council, scientific adviser "European population health survey – Latvia" (CSP, EUROSTAT), leading researcher in several national research programme, expert in the project 2020–2021 "Impact of COVID-19 on health care system and public health in Latvia; ways in preparing health sector for future epidemics", member of several professional associations, received awards for his contribution to promoting public health in Latvia, including in 2020 – certificate of acknowledgement of the Cabinet of Ministers of the Republic of Latvia and in 2020 – the Latvian state decoration, the Cross of Recognition.
- Study courses "Environment, Occupational Health and Occupational Medicine", "Vertical Integration Project Ergonomic Workplaces in a Healthy Environment" – **Ivars Vanadziņš**, Professor of the Department of Occupational and Environmental Medicine, director and leading researcher of the RSU Institute of Occupational Safety and Environmental Health, expert at the Ministry of Health and at the Ministry of Welfare, expert at the Latvian Council of Science, manager of several scientific projects, including ERDF projects "Analysis of characteristics of medical sapropel and its usage for medical purposes and elaboration of industrial extraction methods" in 2017–2020.
- Study courses "Theory of Public Health", "Research Methodology" and supervision and reviewing of Master's theses – **Inese Gobiņa**, assoc. prof. of the Department of Public Health and Epidemiology, expert of the Latvian Council of Science, member of the Public Health Association of Latvia and the International Epidemiological Association. Participates in international scientific projects on a regular basis: from 2021 to 2022, leading researcher in the "Evaluation of the impact of alcohol control policies on morbidity and mortality in Lithuania and other Baltic states", from 2020 to 2021, leading researcher in NRP "Impact of COVID-19 on health care system and public health in Latvia; ways in preparing health sector for future epidemics", from 2019 to 2021, leading researcher in the EU Interreg project "Healthy Boost", etc.
  - Supervision and reviewing of Master's theses – Assoc. Prof. **Anda Kīvīte-Urtāne**, lecturer of the Department of Public Health and Epidemiology, director of the Institute of Public Health, expert of the Latvian Council of Science, leading researcher – scientific project manager in the project "[First Steps Towards the Realisation of Personalised Cervical Cancer Screening Project](#)" (in English – [here](#)). Participated in Covid-19 related projects, one of them in the national research programme of 2020–2021 for the reduction of Covid-19 consequences "Multidisciplinary Approach to Monitor, Mitigate and Contain COVID-19 and Other Future Epidemics in Latvia". Several

other projects were implemented in cooperation with the Ministry of Health of the Republic of Latvia. In recent years, the Associate Professor participated in the Conversation Festival LAMPA discussing topical public health issues with other professionals.

- Study course “Health Care Management” and supervision and reviewing of Master’s theses – **Dzintars Mozgis**, Associate Professor of the Department of Public Health and Epidemiology, deputy director of the Centre for Disease Prevention and Control, member of the National Council for Prevention of Alcohol, member of international supervision councils related to drug supervision and disease and dependence control and prevention – Member of Management Board of the European Monitoring Centre for Drugs and Drug Addiction; Alternate Member of Management Board of the European Centre for Diseases Control and Prevention Drugs and Drug Addiction.
- Study course “Register-based Research” and supervision and reviewing of Master’s theses – Associate Professor **Ieva Strēle**, leading researcher at the RSU Institute of Occupational Safety and Environmental Health, European Commission, Eurostat private expert in task force Morbidity Statistics, leading researcher in the NRP project “Impact of COVID-19 on health care system and public health in Latvia; ways in preparing health sector for future epidemics” (2020-2021).
- Study courses “Theory of Public Health”, “Qualitative Research Methods”, “Health Literacy”, supervision of Master’s theses – **Inese Stars**, Assistant Professor of the Department of Public Health and Epidemiology, lecturer, leading researcher in the NRP project “Impact of COVID-19 on health care system and public health in Latvia; ways in preparing health sector for future epidemics” (2020-2021).
- Study course “Health Promotion Policy and Practice” and supervision of Master’s theses – **Toms Pulmanis**, Assistant Professor of the Department of Public Health and Epidemiology, vice-dean of the Faculty of Public Health and Welfare, member of the board of the Public Health Association of Latvia, long-standing expert in mental health, in 2022 participated in the preparation and submission of the *European Universities* initiative project *Nordic Social Design for European Values – education and research for wellbeing, health, a sustainable society and a good life for all* (NOSEVA) together with representatives of higher education institutions from Finland, Sweden, Norway, Poland, Lithuania, Turkey and Portugal.

Lecturers’ local and international experience, as well as long-term expertise in academic work and consulting of industry professionals makes it possible to include in the content study courses the most pressing challenges in the field of public health, to provide a diverse reflection of the situation and discuss on the most effective internationally proven solutions.

Application and selection procedure of the academic staff at RSU is regulated by the Regulations of Rīga Stradiņš University on Academic Staff Positions, ([Regulations on Academic Elections at Rīga Stradiņš University](#) (Latvian only)) and Rīga Stradiņš University Process “Elections of Academic Staff.

To promote the development of public health as academic discipline, as well as academic succession, four lecturers of the Department of Public Health and Epidemiology, graduates of the academic Master’s study programme “Public Health” **Solvita Kļaviņa-Makrecka, Mirdza Kursīte, Laura Isajeva** and **Kristīne Ozoliņa** are currently studying in the doctoral study programme “Medicine” of Rīga Stradiņš University.

Lecturers of the Department of Public Health and Epidemiology improve their qualifications on a regular basis by participating in trainings at RSU and elsewhere, as well as obtain international experience with participation in the trainings and international conferences offered by international organisations. Every year, lecturers attend about 25 different qualification improvement events

organised by the Centre for Educational Growth and obtain a certificate. Training on the improvement of the study process can be mentioned as examples: Creating Engaging and Interactive Online Course Design and Delivery (in English), *Panopto* platform, Creating interactive content in the e-learning environment (H5P), E-learning training: work in e-academic performance, Basic and advances possibilities of the *Zoom* platform, Creating tests in the e-learning environment, Planner – a tool for organisation of tutorials, Remote testing possibilities, Registering attendance in the e-studies environment, Interactive presentations and real-time feedback in the *Mentimeter* tool, Visualisation of content in presentations, Remote work of student groups with the *Miro* tool, etc.

Training to support phychoemotional health of lecturers are attended well, for example, Emotional aspects of lecturer's work: impact of the remote study process on the lecturer of students, Emotional aspects of lecturer's work or how to work with students constructively in a remote format, Emotional aspects of lecturer's work: constructive cooperation and defining boundaries in the study process, How to protect oneself from burnout (in English).

Trainings to improve skills in working with technologies are actively attended, for example, Creating videos: complex in a simple and short way, Creating animated visual study materials; as well as courses, where lecturer improve their research and publishing skills, for example, Writing scientific publications: friendly guide for lecturers, Possibilities and functions of the new *Web of Science* platform, Possibilities and comparison of *Web of Science* and *Scopus* databases, *EndNote* tool for management of references online, Systematic overview: looking for and organising evidence, Evidence-based medicine information databases, *PubMed* database and its tools for searching scientific publications, Open access to scientific information, Systematic overview: looking for and organising evidence, qualitative research methods.

Apart from the Department of Public Health and Epidemiology, other RSU structural units are involved in the implementation of study courses of the study programme: Statistical Unit, Department of Occupational and Environmental Medicine, Department of Health Psychology and Pedagogy, Department of Welfare and Social Work, Faculty of Communication, etc.

Visiting lecturers are also involved in the implementation of the study programme.

In May 2017, 2018 and 2019, using the Erasmus programme, the course "Health Care Economics" of 2 CP was read by visiting lecturer from the University of Eastern Finland (Kuopio, Finland) PhD **Pavitra Paul**. The professor is an expert in the economic evaluation of health care services and system, his research interest is related to the economic analysis of health care systems and policies in Eastern Europe and former Soviet republics.

In the study course "Epidemiology II", a lecture for master students in 2021 was read by Associate Professor **Noel Barengo** from the Florida International University, Herbert Wertheim College of Medicine (United States). The professor has experience in reading an epidemiology course and a statistics course in several universities, he participated in countless scientific projects on research of diseases and their risk factors.

In the spring semester of 2022, master students had a unique opportunity to participate in the cycle of seminars "International Relationships & Translational Actions Toward Health Equity" led by Fulbright Scholarship recipient PhD **Courtney Queen** (United States), which were organised by the Institute of Public Health. The professor is working at the Health Sciences Center, Texas Tech University, and specialises in matters of medical sociology.

In the autumn semester of 2022, a lecture of the use of econometric modelling in the analysis of epidemic data in the study course "Research Methodology" was read by a visiting lecturer from the United States **Uģis Sprūdžs**. Mr. Sprūdžs has a Master's degree in business administration and long-term experience as an analyst and data modeller in different companies, including in

insurance, marketing, investment funds. During the Covid-19 pandemic°, he was involved in modelling of the development of the epidemic. The expert will continue his cooperation with RSU also next year and will create a new study course within the Fulbright scholarship.

From 1 January 2017 to 1 October 2022, 18 lecturers of the Master's study programme "Public Health" participated in continuing education activities of the Centre for Educational Growth (CEG) attending more than 90 training activities of different content. The lecturers of the study programme "Public Health" spent 1987 academic hours on mastering continuing education activities.

The lecturers participated in the following CEG activities: Reference management tool *EndNote*; Remote work of student groups with the *Miro* tool; Creating Engaging and Interactive Classrooms through Active Learning Techniques; The *PubMed* database and its tools for searching for scientific publications; Possibilities and comparison of *Web of Science* and *Scopus* databases; Digital Darwinism – what it means for us each and our institution; Teaching in intercultural environments; Think tank: how to assess to learn?; Creation of electronic tests; Creating interactive content in the e-learning environment (H5P); Interactive presentations and real-time feedback in the *Mentimeter* tool; How to promote the acquisition of transversal skills relevant to the working environment in the study process; How to create effective image and text compositions in teaching materials; Potential of conflict for building cooperation; Research methodology and statistical processing of data; Art of elocution in pedagogical work; Visualization of content in presentations; Technology-enriched study process, etc.

Enclosed:

Annex 24.7. Analysis of the composition of the teaching staff.

### **3.4.2. Analysis and assessment of the changes to the composition of the teaching staff over the reporting period and their impact on the study quality.**

The implementation of the study programme involves highly qualified lecturers – both permanent RSU lecturers and teachers with experience in other universities, who are experts in the field and specialise in the respective study course topics. The teaching staff is generally stable. The Department of Public Health and Epidemiology has long-term cooperation with several invited teachers. For example, cooperation with Rinalds Muciņš, lecturer of the course "Law in Medicine" has started since the creation of the programme, when he was the Latvian Minister of Health and the state secretary. Daina Volkinšteina reads the course "Intercultural Communication and Research Methods" and is also a lecturer of the Latvian Academy of Culture. Māris Baltiņš has a habilitated doctoral degree in medicine in the sub-field of public health, he is the author of textbook in Latvian "Applied Epidemiology" and a lecturer of the Stockholm School of Economics in Riga.

There were minor changes in teaching staff in the period between accreditations. In the course "Register-based Research" Associate Professor Ieva Strēle was replaced by an invited lecturer *PhD Dr. med.* Iriša Zīle, who is the Senior Data Analyse of the Centre for Disease Prevention and Control. Solvita Kļaviņa-Makrecka, lecturer of the Department of Public Health and Epidemiology took over as the head of the course "Epidemiology I". The number of lecturers with a doctoral degree has increased at the Department of Public Health and Epidemiology, the profile department of the programme, for example, Assistant Professor Dins Šmits (2018), Assistant Professor Toms Pulmanis

(2019), Assistant Professor Inese Stars (2019), Assistant Professor Anita Kokarēviča (2020), Assistant Professor Aija Bukova-Žideļūna (2021) defended their doctoral thesis and obtained a scientific degree in the reporting period. Toms Pulmanis and Aija Bukova-Žideļūna are also graduates of public health study programmes.

Lecturers, who represent employers, for example, Iriša Zīle, Iveta Pudule and Dzintars Mozgis from the Centre for Disease Prevention and Control, Indra Liniņa from the Emergency Medical Assistance Service, and others are involved in the implementation of the programme.

Three graduates of the academic study programme “Public Health” have joined the Department of Public Health and Epidemiology as lecturers in recent years: Mirdza Kursīte, Laura Isajeva and Kristīne Ozoliņa. At the same time, they continue with doctoral studies.

The impact on the quality of studies is evaluated not only based on achievements of lecturers, i.e. scientific activity and professionalism, but also based on the content of the course and its coherence with general learning outcomes and students’ assessments. Therefore, the correlation between the teaching staff and the quality of studies is analysed, taking into account the quality indicators, which include the content level and the individual level (students, lecturers) and are based on the principle of a student-centred approach.

Achievements of students as well as the assessment of lecturers’ work in student surveys provide a basis for assessing the quality of studies. Students provide feedback electronically after the study course, evaluating: topicality and modernity of the study course; the use of theoretical knowledge in practical classes, seminars; the conformity of examinations with the content mastered in the study course; the information and study materials available in the e-learning environment and its conformity for mastering of the content of the study course; the competence of the lecturer in the subject matter of the study course; continuous participation of students in mastering of the study course; feedback from the lecturer on the content of the study course and the assessment received; lecturer’s attitude to students.

Students’ evaluations are summarised at the end of each semester. The head of the study programme studies them. They are discussed with lecturers at a department meeting and also with invited lecturers individually. Special attention is devoted to students’ recommendations for supplementing content and study methods. Survey results are discussed at the Public health study programmes quality council, and presented in a summarised way by the Head of the Department of Public Health and Epidemiology at the meeting of the Council of the Faculty of Public Health and Social Welfare. Previous semester surveys evidence that, in general, when evaluating lecturers’ work, students appreciate and thank for the contribution of lecturers, are able to identify benefits of the study course and the future use of knowledge and skills in the profession.

**3.4.3. Information on the number of the scientific publications of the academic staff members, involved in the implementation of doctoral study programme, as published during the reporting period by listing the most significant publications published in Scopus or WoS CC indexed journals. As for the social sciences, humanitarian sciences, and the science of art, the scientific publications published in ERIH+ indexed journals or peer-reviewed monographs may be additionally specified. Information on the teaching staff included in the database of experts of the Latvian Council of Science in the relevant field of science (total number, name of the lecturer, field of science in which the teaching staff has the status of an expert and expiration date of the Latvian Council of Science expert) (if applicable).**



Not applicable.

**3.4.4. Information on the participation of the academic staff, involved in the implementation of the doctoral study programme, in scientific projects as project managers or prime contractors/ subproject managers/ leading researchers by specifying the name of the relevant project, as well as the source and the amount of the funding. Provide information on the reporting period (if applicable).**

Not applicable.

**3.4.5. Assessment of the cooperation between the teaching staff members by specifying the mechanisms used to promote the cooperation and ensure the interrelation between the study programme and study courses/ modules. Specify also the proportion of the number of the students and the teaching staff within the study programme (at the moment of the submission of the Self-Assessment Report).**

Within the framework of the study programme, cooperation between the lecturers of different study courses is promoted to create optimal and logically sequential content of study courses and the planning of the course by study semesters, thereby ensuring that the knowledge from previously mastered courses serves as the basis for successful mastering of the next courses, as well as to adapt the content of the courses to be studied to the total aims and learning outcomes of the programme.

Matter about the content and implementation of study courses are discussed at department meetings and by organising more extended meetings inviting visiting lecturers. Matters of content of the study programme are also reviewed at the Public health study programmes quality council (PHQC), which includes the director of the programme and also the head of the course, other lecturers, representatives of employers and students. PHQC strengthens the content of the course, which is then presented at the meeting of the Council of the Faculty of Public Health and Social Welfare, and only then it is included in the curriculum of the study programme for the next academic year (form No. D-1 (8)).

Improvements to the content and/or curriculum of a study course can be initiated by:

- students who make their proposals in a course assessment questionnaire or in discussions with heads of study courses and/or head of the study programme;
- heads and lecturers of the study course, if problems are seen in the course implementation planning (volume, time and form of implementation) or content and the form of examination;
- PHQC's proposals or decisions of the Department of Public Health and Epidemiology on optimising and improving the quality of studies, including changing lecturers;
- advice from employers and external experts.

Having received suggestions in written or oral form, the head of the study programme activates a broader discussion by deciding on the necessary format and composition of the discussion. For

example, having received a written proposal from the Ministry of Health and the Centre for Disease Prevention and Control regarding the need to emphasise addiction prevention issues in the study programme, a working group is currently established consisting of the director of the study programme, the vice-dean, the head of the potential course, an expert in the field of addiction prevention, and the content of the new course is being created.

Cooperation between teaching staff members also takes place at international level. Faculty of Public Health and Social Welfare and the implemented programmes in Public Health are a member of the Association of Schools of Public Health in the European Region (ASPHER). Participation in this international organisation allows harmonising the study content with similar programmes in the European Region taking the Public Health Core Competences developed by ASPHER as a basis, and ensures an extensive cooperation with similar study programmes, as well as promoting personal cooperation with similar study programmes in the Baltic region and elsewhere in Europe.

Cooperation in Latvia also takes place through a professional association – the Public Health Association of Latvia. Lecturers, employers and graduates of the programme are its members. Celebrating 25 years of public health education in October 2022, RSU in cooperation with the Public Health Association of Latvia organised a practical scientific discussion, in which graduates and lecturers of study programmes working in different institutions shared their experience on current developments and future challenges in various areas of public health.

The ratio of the number of students and teaching staff in the study programme: 25 students and 25 lecturers. The ratio of the number of students and teaching staff is 1.0.

# Annexes

III - Description of the Study Programme - 3.1. Indicators Describing the Study Programme		
Sample of the diploma and its supplement to be issued for completing the study programme	24.1_Anex_Diploma and supplement_AMSP_Publ_Health.pdf	24.1_pielik_Diploma_un_pielikuma_paraugs_AMSP_Sab_ves.pdf
For academic study programmes - Opinion of the Council of Higher Education in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions (if applicable)	AIP_pielik_prasiba_iznemta_no_AL.pdf	AIP_pielik_prasiba_iznemta_no_AL.pdf
Compliance of the joint study programme with the provisions of the Law on Higher Education Institutions (table) (if applicable)		
Statistics on the students in the reporting period	16_Anex_Statistical data_students_AMSP Public Health.pdf	16_pielik_AMSP_Sabiedribas_veseliba_studejoso_statistika_lv.pdf
III - Description of the Study Programme - 3.2. The Content of Studies and Implementation Thereof		
Compliance with the study programme with the State Education Standard	17.1_Anex_Compl_with_Nat_Ed_Standard_AMSP_Publ_Health.pdf	17.1_pielik_Atbalst_valsts_izgl_stand_AMSP_Sab_ves.pdf
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard or the requirements for professional qualification (if applicable)		
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)		
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	18.1_Anex_St_course_mapping_to_achieve_learn_outcomes_AMSP_Publ_Health.pdf	18.1_pielik_St_kursu_kartej_st_rezult_sasn_AMSP_Sab_ves.pdf
The curriculum of the study programme (for each type and form of the implementation of the study programme)	19_Anex_Study plan_AMSP_Publ_Health.pdf	19_pielik_AMSP_Sabiedribas_veseliba_planojums_lv.pdf
Descriptions of the study courses/ modules	20_Anex_Study_course_description_AMSP_Pub_Health.pdf	20_pielik_Kursu_apr_Sab_Ves_AMSP.pdf
Description of the organisation of the internship of the students (if applicable)		
III - Description of the Study Programme - 3.4. Teaching Staff		
Confirmation that the academic staff of the doctoral study programme includes not less than five doctors, of which at least three are experts approved by the Latvian Council of Science in the branch or sub-branch of science in which the study programme intends to award a scientific degree (if applicable)		
Confirmation that the academic staff of the academic study programme complies with the requirements specified in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions (if applicable)	24.7.1_Annex_Cert_compliance_AMSP_Pub_Health_Akad_staff_AL_55.1.3.pdf	24.7.1_pielik_Apliecinajums_AMSP_Sabiedribas_Veselibas_Akad_pers_atbilstiba_AL_55.1.3.edoc

# Nursing (42723)

Study field	<i>Health Care</i>
ProcedureStudyProgram.Name	<i>Nursing</i>
Education classification code	<i>42723</i>
Type of the study programme	<i>Professional bachelor study programme</i>
Name of the study programme director	<i>Eva</i>
Surname of the study programme director	<i>Cela</i>
E-mail of the study programme director	<i>eva.cela@rsu.lv</i>
Title of the study programme director	<i>lektore, Mg.sc.sal.</i>
Phone of the study programme director	
Goal of the study programme	<i>To provide students of the Nursing Studies study programme with a scientific foundation for professional activity, developing the ability to conduct scientific research independently, developing analytical skills and applying problem-solving methods in patient care, skills and abilities to act independently in various health care situations, observing the requirements of professional ethical standards.</i>
Tasks of the study programme	<p><i>To prepare medical practitioners – nurses – with a competence corresponding to the Education Classification of the Republic of Latvia and the Law on the Regulated Professions and the Recognition of Professional Qualifications in patient care, who use scientific methods and other types of inquiries to deal with various situations and problems in health care.</i></p> <p><i>To analyse changes in the health care system and to prepare professional nurses for work in different health sectors.</i></p> <p><i>To prepare specialists, who educate patients, their family members, members of the care team, and the society.</i></p> <p><i>To implement the acquisition of basic and specialised knowledge in nursing studies.</i></p> <p><i>To promote the creation of an independent, creative personality, who develops the foundations of nursing practice, as well as organises and manages care work.</i></p> <p><i>To develop the ability to relate the knowledge and research results to health care practice (interaction of theory and practice); use of theoretical and practical findings in evidence-based health care practice.</i></p> <p><i>To promote competitiveness of graduates of the programme in changing socio-economic conditions in the local and international labour market.</i></p> <p><i>To prepare for Master's studies and develop lifelong learning skills.</i></p>

Results of the study programme	<p><i>Knowledge</i></p> <p>1. Able to demonstrate knowledge of the sciences that underpin general patient care and an understanding of the healthy and diseased human body, physiological functions and behaviour, and the impact of the physical and social environment on health.</p> <p>2. Able to demonstrate an understanding of the nature and ethics of the nursing profession and the general principles of health and patient care and conduct business in the nursing profession and/or health care, research or further learning in complex, changing and uncertain circumstances.</p> <p>3. Able to demonstrate knowledge of the general principles of health and patient care, providing patient-centred care through the selection of modern tools for patient care and disease prevention, integrating the knowledge generated by the medical disciplines into a coherent vision of modern health care.</p> <p><i>Skills</i></p> <p>4. Able to independently differentiate patient health disorders and independently perform clinical interventions and procedures, the process of care and its phases - assessment, problem identification, planning, implementation and evaluation of care based on demonstration-based performance.</p> <p>5. Able to explain and discuss complex or systemic aspects of nursing and healthcare with both professionals and non-professionals in a reasoned manner. Able to demonstrate skills in educating patients and their families about healthcare issues and healthcare professionals working in the healthcare system in a practical manner.</p> <p>6. Able to independently direct the development of own competencies in nursing and to use modern self-improvement techniques, including simulation-based methods, to use only patient-safe tools, methods and measures.</p> <p>7. Able to provide emergency medical care and apply clinical skills and procedures appropriate to the standard of the profession in a patient-safe manner, regularly improving their skills through the use of innovative techniques and methods.</p> <p><i>Competences</i></p> <p>8. Able to undertake evidence-based planning, provision and evaluation of general patient care, independently or as part of a healthcare team, in direct contact with the sick or healthy individual, carrying out additional analysis, to achieve optimal outcomes of care, evaluating and taking responsibility for their own performance.</p> <p>9. Able to select information using scientific innovations in health care and demonstrate an understanding of the implementation of evidence-based advances in nursing practice, as well as the implementation and management of patient care processes, through the education of patients and their families, healthcare team professionals and the public in collaboration with other health and social care professionals and institutions, in compliance with professional ethical and legal standards.</p>
Final examination upon the completion of the study programme	National examination

# Study programme forms

## Full time studies - 4 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	<i>4</i>
Duration in month	<i>0</i>
Language	<i>latvian</i>
Amount (CP)	<i>160</i>
Admission requirements (in English)	<i>Secondary education</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	<i>Professional Bachelor's Degree in Health Care</i>
Qualification to be obtained (in english)	<i>Nurse (General Care Nurse)</i>

## Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007
Liepāja branch of Rīga Stradiņš University	LIEPĀJA	RIŅĶU IELA 24/26, LIEPĀJA, LV-3405

## Full time studies - 4 years - english

Study type and form	<i>Full time studies</i>
Duration in full years	<i>4</i>
Duration in month	<i>0</i>
Language	<i>english</i>
Amount (CP)	<i>160</i>
Admission requirements (in English)	<i>Secondary education Studies in English require knowledge of English of at least B2.</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	<i>Professional Bachelor's Degree in Health Care</i>
Qualification to be obtained (in english)	<i>Nurse (General Care Nurse)</i>

## Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007
Liepāja branch of Rīga Stradiņš University	LIEPĀJA	RIŅĶU IELA 24/26, LIEPĀJA, LV-3405

### 3.1. Indicators Describing the Study Programme

**3.1.1. Description and analysis of changes in the parameters of the study programme made since the issuance of the previous accreditation form of the study field or issuance of the study programme license, if the study programme is not included on the accreditation form of the study field, including changes planned within the evaluation procedure of the study field evaluation procedure.**

Table 1. Changes in Parameters of the Study Programme (StP)

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period	Planned changes within the assessment procedure
1.	Study direction	—	—
2.	Title of the StP	—	—
3.	Code according to the Latvian Education Classification	—	—
4.	Head of the StP	—	—
5.	Scientific degree of the head of the StP	—	—
6.	Objective of the StP	Updated - has become more detailed and transparent emphasising graduate's professional competences	—
7.	Tasks of the StP	Updated in accordance with the profession standard "General Care Nurse" approved in 2020	—

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period	Planned changes within the assessment procedure
8.	Learning outcomes to be achieved	Updated to achieve the study aim of StP	—
9.	Final examination upon the completion of the StP	—	—
10.	Type and form of studies	—	—
11.	Duration of implementation	—	—
12.	Language of implementation	—	—
13.	Workload of the StP (CP)	—	—
14.	Admission requirements	Updated in accordance with Latvian regulatory enactments	—
15.	Degree to be awarded	—	—
16.	Qualification to be awarded	Nurse (general care nurse)	—
17.	Place of implementation	Place of implementation – Riga and Liepāja Branch. After the programme licence was amended, the programme is no longer implemented in Daugavpils	—

The first table clearly shows that changes in the programme were not extensive, but some items



were changed.

On 12 August 2020, the profession standard of a nurse (general care nurse)[1] was approved – fifth professional qualification level (PQL 5), which corresponds to the sixth level of the Latvian Qualifications Framework (LQF 6) and defines professional duties, tasks and the skills, knowledge and competences necessary for their performance taking into account the structure developed by the European Federation of Nurses Associations (EFNA) and respecting the EFNA setting: the base education of the general care nurse is obtained in a higher education institution.

On 7 October 2020, “Amendments to the Law “On the Regulated Professions and the Recognition of Professional Qualifications””[2] entered into force, which provided that from 1 January 2022 the name of the regulated profession “Nurse (medical nurse)” in the field of health care will change to “Nurse (general care nurse)”. The amendments provide that the duration of the nurse’s education programme is four academic years in full-time studies of 160 credit points, which include at least 4600 theoretical and clinical contact hours, of which theoretical training is at least one third of the time and clinical training – at least half of the minimum duration of the education programme.

On 10 December 2020, amendments to Regulations of the Cabinet of Ministers No. 268 of 24 March 2009 “Regulations on the Therapeutic Expertise of Medical Personnel and Students Acquiring the First- Or Second-Level Professional Higher Medical Education and the Extent of Their Theoretical and Practical Knowledge”<sup>3</sup> were approved.

In 2018-2020, one of the most significant problems highlighted by the employer survey data is that the mobility of nurses in the labour market is restricted by a large number of principal specialties (7) in the nurse’s profession, for example, a nurse specialising in internal care cannot work in a general surgical department independently without a proper certificate. Therefore, Latvia, similarly to other EU countries, must set and start discussions on the number of principal specialties in the nurse’s profession.

To introduce specific changes in nurse’s education, representatives of the management of the RSU professional Bachelor’s study programme “Nursing Studies” participated in: 1) working groups of the Ministry of Health (representatives of professional organisations, representatives of delegated higher education institutions and representatives of the Ministry of Education and Science are involved in them), 2) study and analysis of EU and Latvian regulatory enactments, which regulate nurses’ education and their professional activity, 3) study of experiences of Lithuania, Estonia and other EU counties.

Taking into account all the aforementioned and approved normative regulations (profession standard, CM regulations, etc.[3]) to fulfil conditions, StP “Nursing Studies” has been reviewed and created in cooperation with industry experts, employer representatives and the Latvian Nurses Association, involving academic and general staff, student representatives and foreign experts. Therefore, in June 2021, changes to the licence of the RSU study direction “Health Care” and corresponding professional Bachelor’s study programme “Nursing Studies” were made, compliance of which is evaluated in Annex 18.1, mapping it against the content of the programme and updating titles and content of study courses for individual study courses (for course descriptions see Annex 20). The amount of learning outcomes was reduced, updating their content and combining learning outcomes of StP.

Lessons learnt from the study process during the COVID-19 pandemic show that the study programme can combine regular classes and online remote classes, so a pragmatically planned and technology-enriched study process can contribute to the attraction of students to and resilience of students in the programme.

[1] The profession standard of a nurse (general care nurse) was coordinated at the meeting of the

Tripartite Cooperation Subcommittee on Vocational Education and Employment of 12 August 2020, minutes No. 6. <https://registri.visc.gov.lv/profizglitiba/dokumenti/standarti/2017/PS-144.pdf>

[2] Law "On the Regulated Professions and the Recognition of Professional Qualifications". 20.06.2001 Latvijas Vēstnesis, 105, 06.07.2001, <https://likumi.lv/ta/id/26021-par-reglamentetajam-profesijam-un-profesionalas-kvalifikacijas-atzisanu>

[3] <https://likumi.lv/ta/id/190610/redakcijas-datums/2022/01/01/2013>. Article 31(6), (7) of Directive 2005/36/EC (Directive 2013/55/EU of the European Parliament and of the Council of 20.11.2013 amending Directive 2005/36/EC on the recognition of professional qualifications and Regulation (EU) No 1024/2012 on administrative cooperation through the Internal Market Information System).

**3.1.2. Analysis and assessment of the study programme compliance with the study field. Analysis of the interrelation between the code of the study programme, the degree, professional qualification/professional qualification requirements or the degree and professional qualification to be acquired, the aims, objectives, learning outcomes, and the admission requirements. Description of the duration and scope of the implementation of the study programme (including different options of the study programme implementation) and evaluation of its usefulness.**

The need for the professional Bachelor's StP "Nursing Studies" is provided for and its concept is supported by the European region strategic policy documents in health care of the World Health Organization[1], European Union strategic documents in education (Bologna Process)[2], Communication from the Commission on achieving the European Education Area by 2025[3], as well as development progress and needs of the Latvian state and economy (National Development Plan 2021-2027)[4]; CM Regulations No. 537 "On the Conceptual Report "On Further Development of Nurse's Profession""[5]; Science, Technology Development and Innovation Guidelines 2021-2027[6]; Digital Transformation Guidelines 2021-2027[7]; Law on Higher Education Institutions[8], as well as the RSU mission which provides to ensure the creation, accumulation and transfer of knowledge valued by the international scientific community and to offer excellent, inclusive and sustainable educational opportunities in the health, life and social sciences to realise the potential of everyone throughout their lives[9].

The title of the professional Bachelor's StP "Nursing Studies" reflects the profession that the student learns by studying in the RSU programme and obtaining a professional Bachelor's degree in health care and the qualification "Nurse (General care nurse)". A nurse is a medical practitioner who has acquired education in accordance with the requirements laid down in the Law on the Regulated Professions and the Recognition of Professional Qualifications[10]. As part of his/her professional activity, a nurse in accordance with his/her competence: 1) performs patient care; 2) participates in medical treatment; 3) manages patient care work; 4) educates patients in health matters; 5) performs professional education work.

The code of the study programme corresponds to the classification of Education and Training Sectors defined in Annex 2 to Regulations of the Cabinet of Ministers No. 322 "Regulations on the Latvian Education Classification"[11]. Nursing Studies belong to the thematic field of education "Health and Social Welfare", the thematic field of education "Health Care", group of education programmes "Nursing Studies", therefore the final numbers of the StP code are 723. A conclusion can be made that StP corresponds to the study direction.

The Professional Bachelor's StP "Nursing Studies" is implemented as full-time study programme – the duration of studies is 4 years or 8 semesters, the total amount of credit points is 160 CP (240 ECTS). The study programme is implemented both in Latvian and in English in Riga and in Latvian at the RSU Liepāja Branch.

**Aim** of the professional study programme "Nursing Studies": to provide students of the study programme "Nursing Studies" with a scientific foundation for professional activity, developing the ability to independently conduct scientific research, developing analytical skills in care, skills and techniques to act independently in different care situations, using evidence-based problem solution methods, observing the requirements of professional ethical standards.

**Tasks** of StP "Nursing Studies":

- 1) to prepare medical practitioners – nurses – with relevant competence in patient care, who use scientific methods and other types of inquiries to deal with various situations and problems in health care;
- 2) to analyse changes in the healthcare system and to prepare professional nurses for work in different health sectors;
- 3) to prepare specialists educating patients, their family members, care team participants, as well as the society;
- 4) to promote the creation of an independent, creative personality, who develops the foundations of nursing practice, as well as organises and manages care work;
- 5) to increase programme graduates' competitiveness under the changeable socio-economic circumstances in the local and international labour market;
- 6) to prepare for further education in respective Master's level study programmes;
- 7) to develop lifelong learning skills.

Learning **outcomes** of StP "Nursing Studies":

- 1) Able to demonstrate knowledge of the sciences that underpin general patient care and an understanding of the healthy and diseased human body, physiological functions and behaviour, and the impact of the physical and social environment on health.
- 2) Able to demonstrate knowledge of the general principles of health and patient care, providing patient-centred care through the selection of modern tools for patient care and disease prevention, integrating the knowledge generated by the medical disciplines into a coherent vision of modern health care.
- 3) Able to independently differentiate patient health disorders and independently perform clinical interventions and procedures, the process of care and its phases - assessment, problem identification, planning, implementation and evaluation of care based on demonstration-based performance.
- 4) Able to select information using scientific innovations in health care and demonstrate an understanding of the implementation of evidence-based advances in nursing practice, as well as the implementation and management of patient care processes, through the education of patients and their families, healthcare team professionals and the public in collaboration with other health and social care professionals and institutions, in compliance with professional ethical and legal standards.
- 5) Able to demonstrate an understanding of the nature and ethics of the nursing profession and the

general principles of health and patient care and conduct business in the nursing profession and/or health care, research or further learning in complex, changing and uncertain circumstances.

6) Able to provide emergency medical care and apply clinical skills and procedures appropriate to the standard of the profession in a patient-safe manner, regularly improving their skills through the use of innovative techniques and methods.

7) Able to explain and discuss complex or systemic aspects of nursing and healthcare with both professionals and non-professionals in a reasoned manner. Able to demonstrate skills in educating patients and their families about healthcare issues and healthcare professionals working in the healthcare system in a practical manner.

8) Able to independently direct the development of own competencies in nursing and to use modern self-improvement techniques, including simulation-based methods, to use only patient-safe tools, methods and measures.

9) Able to undertake evidence-based planning, provision and evaluation of general patient care, independently or as part of a healthcare team, in direct contact with the sick or healthy individual, carrying out additional analysis, to achieve optimal outcomes of care, evaluating and taking responsibility for their own performance.

The study programme “Nursing Studies” corresponds to all the goals of the reform of the nurse’s profession and the profession standard. The programme was developed in accordance with the Law on Higher Education Institutions, the Education Law, CM Regulations No. 268 “Regulations on the Therapeutic Expertise of Medical Personnel and Students Acquiring the First- Or Second-Level Professional Higher Medical Education and the Extent of Their Theoretical and Practical Knowledge”, CM Regulations No. 264 “Classification of Professions, Basic Tasks Corresponding to the Profession and Basic Qualification Requirements”, the Law on the Regulated Professions and the Recognition of Professional Qualifications, the Vocational Education Law, CM Regulations No. 240 “Regulations on the National Standard of Academic Education”, CM Regulations No. 68 “Minimum Requirements of Educational Programmes for the Acquisition of the Professional Qualification of Dentist, Pharmacist, Nurse and Midwife”, the Medical Treatment Law, Directive of the European Parliament and of the Council 2013/55/EU, Council Directive 77/453/EEC, Council Directive 77/452/EEC and Council Directive 93/16/EEC concerning the professions of nurse responsible for general care, dental practitioner, veterinary surgeon, midwife, architect, pharmacist and doctor, Standards and Guidelines for Quality Assurance in European Higher Education Area of the European Association for Quality Assurance in Higher Education, regulations and standards of the International Council of Nurses relating to education of nurses respecting national individual characteristics and requirements.

StP “Nursing Studies” corresponds to CM Regulations No. 322 “Regulations on the Classification of the Latvian Education” – level 2 professional higher education (level 5 professional qualification and professional bachelor degree, EQF 6) when preparing nurses, who prove to be knowledgeable professionals in the labour market basing the activity on principles of humanism, certifying cognitive, creative and scientific skills.

In accordance with the Law on Higher Education Institutions, the volume of the programme and study courses is expressed in credit points (CP/ECTS, European Credit Transfer and Accumulation System): 40 CP (60 ECTS) are linked to learning outcomes and the respective student’s workload in the academic year, and 20 CP (30 ECTS) are linked to a semester. Student’s workload is usually 1500–1800 hours per academic year, and one credit point corresponds to the learning outcomes, the achievement of which require 25–30 working hours on average. Student’s workload includes all study aspects and applies not only to formal contact hours of studies.

The interrelation between learning outcomes of study courses and study programmes was assessed in depth in academic year 2019/2020, and was revised in a targeted manner in academic year 2020/2021 when preparing for amendments to the 2021 licence and the accreditation in 2022. On the basis of the mapping results, the aims, objectives and learning outcomes of StP were updated. Using the mapping instrument, the evaluation of compliance of learning outcomes (knowledge, skills, competences) of study courses, the outcomes of StP, and compliance of the content of StP to the content of the profession of a nurse (general care nurse) continued (see Annexes 18.1 and 18.2).

The learning outcomes of the study courses included in the study programme are generally related to the learning outcomes of StP. By analysing the mapping results, evaluating trends in the requirements set by employers and the Latvian Nurses Association to increase the professionalism, and taking into account students' proposals, the results of national degree examinations, proposals of graduates working in the sector and recommendations of the study quality council, the changes initiated during the reporting period were introduced in the study programme.

Applicants of the StP "Nursing Studies" are enrolled according to the competition results, which are made up of the CE assessments in mathematics, Latvian language, foreign language and the annual grade in biology or life sciences. The overall assessment of the admission results (100%) is composed of: 40% of the total assessment is the annual grade in biology or life sciences, 10% of the total assessment is the CE assessment in mathematics, 25% of the total assessment is the CE assessment in Latvian and 25% of the total assessment is the CE assessment in a foreign language or an international testing institution's examination assessment in a foreign language. In the event of equal score, CE assessment in Latvian language is considered in the competition. Additional points are added to the total competition result for honourable places (places from 1 to 3): at (national) subject olympiads of the Republic of Latvia – 2 points, at international subject olympiads – 4 points. Latvian (national) scientific research works of pupils in the following sections: life sciences, medicine and health sciences – 1 point, international scientific research works of pupils in the following sections: life sciences, medicine and health sciences – 2 points.

Applicants are admitted to StP "Nursing Studies" in English in accordance with CM Regulations No. 846 "Regulations Regarding Requirements, Criteria and Procedure for Admission to Study Programmes"[12].

In accordance with CM Regulations No. 932 "The Procedure for Starting Studies in Later Stages of Studies", applicants (including after Level I professional higher education study programme "Nursing Studies") can apply for continuation of studies at later stages in accordance with the learning outcomes achieved in previous education or professional experience.

**Student admission procedure.** Student admission is carried out in accordance with the Admission Regulations approved by the RSU Senate for the respective academic year and external regulations. In accordance with Paragraph 3 of Cabinet Regulations No. 846 "Regarding Requirements, Criteria and Procedure for Admission to Study Programmes" of 10 October 2006, the rules for admission to study programmes for the following academic year shall be drawn up, approved and published (also on the website) each year by 1 November.

The technical procedures of admission are established and described in Paragraph 7.1 of RSU Process Description No. 7 "Service Provision for Students".

RSU applicants apply electronically on website <http://www.rsu.lv/studiju-iespejas/uznemsana>. The information is available on <http://www.rsu.lv/studiju-iespejas/pamatstudijas/medicinas-un-veselibas-aprupes-studiju-programmas/maszinibas>.

**Recognition of previously acquired non-formal and professional experience.** In accordance with the Cabinet Regulations No. 505 “Regulations Regarding Recognition of the Study Results Achieved in Previous Education or Professional Experience” any person is entitled to submit an application to Rīga Stradiņš University regarding recognition of competences acquired outside formal education or in professional experience and learning outcomes achieved in previous education in a study programme or part thereof implemented by a higher education institution.

The decision on recognition of competences acquired outside formal education or in professional experience and learning outcomes achieved in previous education is adopted by the committee for recognition of competences acquired outside formal education or in professional experience and learning outcomes achieved in previous education created by the higher education institution. Its rights, duties, conditions for creation, as well as the specific conditions for recognition of learning outcomes achieved in previous education or professional experience are included in the: Regulations on Recognition of Competence Acquired Outside Formal Education or in Professional Experience and of Learning Outcomes Achieved in Prior Education at Rīga Stradiņš University and Regulations on Crediting Study Results and Resuming Studies at Subsequent Study Stages: <https://www.rsu.lv/studiju-iespejas/uznemsana/studiju-rezultatu-atzisana>. In order to begin recognition of learning outcomes achieved, the following should be submitted to the learning outcome recognition commission: application; documents certifying the learning outcomes achieved in the previous education or professional experience; payment order from the bank proving the payment made.

From 2017 until now (17.11.2022) 12 evaluations of the content and volume of education, knowledge obtained in professional experience, mastered continuing education and professional improvement education in the nurse's profession have been made.

It should be concluded that the formulation of the learning outcomes of StP clearly arises from the title, aim and tasks of the programme and corresponds to the degree and the qualification to be awarded. The learning outcomes are formulated using a student-centred approach, in a structured manner defining the knowledge, skills, competences that the student has and that the student/graduate is able to use and implement after graduation from the study programme. The learning outcomes of the study courses included in the study programme are generally related to the aim and learning outcomes of StP. This interrelation is clearly shown in the mapping of the study programme. Several study courses correspond to each learning outcome (see Annex 18.1).

Enclosed:

Annex 24.1. Model diploma and supplement thereto.

Annex 24.8. Sample study contract.

[1] WHO. Regional office for Europe. (2017). *Roadmap to implement the 2030 Agenda for Sustainable Development, building on Health 2020, the European policy for health and well-being*. [https://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0008/345599/67wd09e\\_SDGroadmap\\_170638.pdf](https://www.euro.who.int/__data/assets/pdf_file/0008/345599/67wd09e_SDGroadmap_170638.pdf)

[2] EHEA. *European Higher Education Area and Bologna Process*. <http://www.ehea.info/>. Ministry of Education and Science. *Bologna process*. <https://www.izm.gov.lv/lv/bolonas-process>

[3] EUR-Lex. *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on achieving the European Education Area by 2025*. <https://eur-lex.europa.eu/legal-content/LV/TXT/?uri=CELEX:52020DC0625>

[4] Cross-Sectoral Coordination Centre. *NDP2027*. <https://www.pkc.gov.lv/lv/nap2027>

[5] Regulations of the Cabinet of Ministers No. 537 “On the Conceptual Report “On Further

Development of Nurse's Profession"" . 29.10.2019 Latvijas Vēstnesis, 222, 01.11.2019,  
<https://likumi.lv/ta/id/310369-par-konceptualo-zinojumu-par-masas-profesijas-turpmako-attistibu>

[6] Order of the Cabinet of Ministers No. 246 "On Science, Technology Development and Innovation Guidelines 2021-2027". 14.04.2021 Latvijas Vēstnesis, 73, 16.04.2021,  
<https://likumi.lv/ta/id/322468-par-zinatnes-tehnologijas-attistibas-un-inovacijas-pamatnostadnem-20212027-gadam>

[7] Order of the Cabinet of Ministers No. 490 "Digital Transformation Guidelines 2021-2027". 07.07.2021 Latvijas Vēstnesis, 133, 14.07.2021,  
<https://likumi.lv/ta/id/324715-par-digitalas-transformacijas-pamatnostadnem-20212027-gadam>

[8] Law on Higher Education Institutions. 02.11.1995 Latvijas Vēstnesis, 179, 17.11.1995,  
<https://likumi.lv/doc.php?id=37967&mode=KDOC>

[9] Rīga Stradiņš University. *RSU Development Strategy 2021-2027*.  
<https://www.rsu.lv/par-rsu/strategija-dokumenti>

[10] On the Regulated Professions and the Recognition of Professional Qualifications. 20.06.2001 Latvijas Vēstnesis, 105, 06.07.2001,  
<https://likumi.lv/ta/id/26021-par-reglamentetajam-profesijam-un-profesionalas-kvalifikācijas-atzīšanu>

[11] Regulations of the Cabinet of Ministers No. 322 "Regulations on the Latvian Education Classification". 13.06.2017 Latvijas Vēstnesis, 119, 15.06.2017,  
<https://likumi.lv/ta/id/291524-noteikumi-par-latvijas-izglitības-klasifikāciju>

[12] Regulations of the Cabinet of Ministers No.846 "Regulations Regarding the Requirements, Criteria and Procedures for Admission to Study Programmes". 10.10.2006 Latvijas Vēstnesis, 172, 27.10.2006,  
<https://likumi.lv/ta/id/146637-noteikumi-par-prasībām-kriterijiem-un-kartību-uzņemšanai-studiju-programmas>

### **3.1.3. Economic and/ or social substantiation of the study programme, analysis of graduates' employment.**

Significance of professional Bachelor's study programme "Nursing Studies":

1. Demand for specialists: the shortage of medical staff is one of the main problems in the Latvian health sector. Latvia: Country Health Profile 2021 created by the Organisation for Economic Co-operation and Development (OECD) for the European Commission shows that there is shortage of healthcare professionals in Latvia and their distribution is uneven.[1]

The aim of the strategy "Europe 2020" is to increase the share of the population having completed tertiary education from 31% to 40% in 2020. There is a forecast in the report of the Ministry of Economics that by 2035 the demand for workforce will continue to rearrange in favour of specialists with higher education. More than half of jobs by 2030 are expected to need highly qualified specialists.[2] The Latvian State Audit Office conducted an audit of the availability of human resources in the field of health care and concluded that at least 3500 nurses and about 300 midwives are missing; only 65% of specialists remain in Latvia after they get a diploma.[3]

2. Labour market development trends and forecasts: the shortage of nurses in health care is the



biggest. The sector requires 3598 more nurses.[4]

Statistical data evidence that the number of nurses in Latvia is insufficient, and the number of registered and working nurses have reduced by about 21% in the last 10 years. There is no succession of generations in the nurse's profession. In 2020, 18,951 nurses were registered in Latvia, of which 12,498 were entitled to practice, but only 8,532 were employed in the nurse's profession, and according to estimates of the Latvian Nurses Association, approximately 40% of the working nurses are of pre-retirement or retirement age.

To ensure optimum quality of care for patients, the Public Health Guidelines 2014-2020 set a target of achieving a ratio between practicing doctors and practicing nurses 1:1.25 by 2020. The indicator has not been achieved, and this is related to long-term underfunding of the health sector, including insufficient funding for increasing wages of medical practitioners, therefore the recruitment of new staff in the state-paid health sector was not very effective, promoting ageing of staff.[5] The economic model projects that the demand for health care workers will rise to 80 million by 2030. On the other hand, the supply of health care workers will reach only 65 million over the same period, resulting in a shortage of 15 million health care workers worldwide. The growth in demand for health care workers is expected to be the highest in middle-income countries, driven by population growth and aging. This, in turn, can boost global-scale competition for skilled health care workers.

In 2030, Europe is expected to be lacking 1.4 million health care workers. The projections of the number of health care workers needed to meet basic health service goals set by the World Health Organization suggest there will be a surplus of around 7 million health care workers in Europe. When comparing forecasts based on demand (shortage of 1.4 million of workers in Europe) and needs (7 million surplus of workers in Europe), it can be seen whether the shortage of health care workers is caused by supply or economic demand constraints (or both).[6]

Situation in Latvia and elsewhere – the rapid development of medical technologies, rapidly growing health care costs, inequality in health sector, demographic changes in population and dominance of chronic diseases and functioning restrictions, need for accessible, effective and quality health care services – all present a challenge to the health care sector. In the education process, it is vital to prepare specialists, who are able to drive change in the health care sector, including in nursing practices, to ensure the transfer of accumulated, clinical evidence based knowledge in daily practices, to implement person-centred care and interdisciplinary cooperation in coordination and ensuring succession, of health care services[7], including provision of care[8].

In the period from 30 July 2019 to 31 March 2020, [at the order of RSU within a project\[9\]](#) SIA “Dynamic University” (DyU) conducted a study summarising its results in the final report “Study of competitiveness of study programmes of Rīga Stradiņš University and RSU Red Cross Medical College and compliance with medium-term and long-term labour market and industry development trends”. In accordance with the DyU study, the demand for nurses is already high and might grow in the future. It is already difficult to find qualified workers and fill the vacancies of nurses (both in Riga and in regions). The labour demand is expected to be closely related to the amount of funding of the state and European Structural Funds, which will be available in the sector.

Experience in work with students, discussions with employers and this study show that nurses with proper education are in demand in the labour market. Graduates of RSU's StP “Nursing Studies” are employed in state, local government and private health care. When selecting employees, employers appreciate, if the nurse obtained education at RSU.

QS World University Rankings (2022), one of the most renowned providers of services, analysis and reviews in the field of higher education, has placed RSU among the leading universities of the world for the fourth year in a row in its internationally recognised *QS World University Rankings*. [10] QS



data show that this year RSU was evaluated in the employers' survey much higher than last year. This proves that employers appreciate knowledge, skills and competence of the graduates prepared by the university. This summer, Kantar, Latvia's leading research and consultation company, has recognised RSU as the university having the best reputation in Latvia in its annual reputation study for the fifth year in a row. Respondents believe that a strength of RSU is the high appreciation of the diploma obtained in the labour market, the quality of education and the practical knowledge and skills obtained in the study process, which are necessary for work in the specialty. The data published this year show: The average employment of graduates of Latvian higher education institutions is 80%, while 92% of RSU graduates get successfully included in the labour market. High employment indicators of RSU graduates confirm that the study programme complies with labour market needs.

In order to maintain and improve the quality and topicality of the StP "Nursing Studies", mechanisms of reception of feedback from students have been established – oral and written surveys, which enable **students to participate in the quality monitoring of the study programme** – to express opinions and suggestions regarding the content of study courses, implementation methods, competences and working style of teachers.

Students participate in the evaluation of the study programme electronically, having previously received information that if they provide feedback on learning outcomes from the point of view of the study content and process, teaching staff can evaluate and improve their work. During meetings, the director of the study programme urges students to complete these assessment questionnaires because they provide recommendations how to improve the content of the study programme. The information obtained is used for improvement of the quality of studies by making changes to the content, implementation methodology and study plans of the study course. The number of unfilled student questionnaires is decreasing due to reminders and discussions in the study process about the importance of filling out questionnaires and improving the study programme.

When the evaluation process begins at the end of each semester, the student is automatically given the opportunity to complete questionnaires for each study course. Data is summarised automatically, thus ensuring anonymity of the survey. In this case, however, this is probably also seen as a drawback, as with each semester of the academic year student participation could be higher, especially among students at the Liepāja Branch (23-61% on average). During talks, students are shown examples of how survey results are taken into account in improving study courses. The average assessment of study courses in recent years has been high, there are no sharp changes, however, in the future the volume of completion of study process questionnaires needs to be updated. The majority of students are fully satisfied or more satisfied, but there is a need to further assess students' satisfaction with the learning outcomes to take the necessary interventions.

The survey results are also discussed in the council meeting of the Faculty of Public Health and Social Welfare and in the Nursing Studies Quality Council every semester, deciding in discussions on the issue of improvement measures, for example, on the planned topics or the way they are presented in the research methodology study courses. In the future, student motivation measures should probably be planned to increase the volume of completion of questionnaires, as well as to exclude that students do this formally.

To learn the opinion of employers about the competences of graduates, regular and constructive cooperation is taking place, involving employers in regular surveys, work of the Study Quality Council and national degree examinations, opinions and suggestions for improvement of the efficiency and quality of the study process are taken into account. Meeting with the members of the

National Examination Board and members of the Study Quality Council, which include representatives of employers, the Latvian Nurses Association and, since 2021, representatives of the Association of Diaspora Nurses and Midwives, regularly provide information on their opinion and satisfaction with the specialists prepared by the programme. The employers' representatives addressed usually provide positive feedback indicating that students have both good and excellent theoretical knowledge and practical skills, which have been promoted by the clinical placement implemented during the study process. There is also the opinion that it is difficult to judge because it depends on a particular graduate.

Employers have largely assessed the following skills as good and very good: "ability to identify and solve problem situations", "ability to work as a team", "ability to use digital devices", "ability to use knowledge of a foreign language" and "ability to make decisions and substantiate them". The following skills are average in the assessment: "skill to offer new ideas and solutions", "skill to work independently". This is due to the fact that students in the programme have to master many clinical skills, which are strictly regulated by the profession standard, but it is more difficult to offer ideas, solutions and substantiate them. To improve the skills in which students should think "beyond the bounds" or in non-standard situations, study courses will offer and integrate simulation games into clinical study courses in the pre-clinical learning centre, simulating the most realistic and complex life situations possible from the classical professional routine of nurses.

In 2017, in order to improve the obtaining of feedback from graduates who graduated from RSU some time ago, RSU Alumni Association in cooperation with RSU Academic Affairs Department and Centre for Educational Growth developed a unified questionnaire for graduates (see Annex 21.3), which was published on the RSU website in autumn 2019. In 2022, an additional invitation to complete the questionnaire was sent to graduates of the professional Bachelor's study programme "Nursing Studies".

When analysing the questionnaires of graduates of StP "Nursing Studies", it can be concluded that the profession of a nurse is chosen by women (99% of respondents) convincingly more often from year to year than by men, which is a common feature of health care and socially oriented study programmes. The majority of respondents started studies in the study programme immediately after a secondary school, thus demonstrating the ability of the programme to positively position itself among other study programmes and attracting interest of applicants.

After graduation, graduates of the study programme "Nursing Studies" most often work in Latvia – Riga (87% of respondents), most often as employees (98%), which reflects the trend that a large proportion of young specialists start working in state or local government institutions as nurses and are less likely to start working as self-employed persons or develop private businesses.

Almost all of the surveyed graduates generally assess the graduated study programme positively (92% of respondents). It is noted that graduates are rather more likely to positively evaluate theoretical knowledge acquired during studies (92% of respondents), and the practical skills are also positively evaluated by many respondents – 93% of respondents. All respondents have recognised that the competences in the profession acquired in the study programme are useful. This indicates the need to develop the practical section of the study programme for mastering of the practical skills and knowledge required in the profession of nurse. It should be mentioned that graduates of recent years were more critical and demanding because less respondents indicate that their preparation was "very good", there are more of those, who marked "good". This is probably related to the effects of the pandemic, organisational changes in the study process and the fact that students experience less regular contacts, as well as that the total level of self-confidence of students has increased. Similarly, the overwhelming majority of respondents (96%) indicated that the acquired education has contributed to finding a job.

It is positive assessment of the study programme that 91% of respondents believe would recommend this study programme to other persons, who are interested to study. Overall, the assessments can be considered positive both in terms of study content and outcomes.

Enclosed:

Annex 21.1. Information on Student Survey Results.

Annex 21.2. Information on Survey Results of Graduates of the Study Programme.

[1] OECD. *Latvia: Country Health Profile 2021*.

<https://www.oecd-ilibrary.org/docserver/11bb880a-lv.pdf?expires=1667152163&id=id&accname=guest&checksum=DCC9ED5C965F11A52DBFFB0FCE5D97EE>

[2] European Commission. *Europe 2020. A strategy for smart, sustainable and inclusive growth*.

[https://ec.europa.eu/eu2020/pdf/1\\_LV\\_ACT\\_part1\\_v1.pdf](https://ec.europa.eu/eu2020/pdf/1_LV_ACT_part1_v1.pdf)

[3] State Audit Office of the Republic of Latvia. (2019). *Human resources in health care*.

[https://www.lrvk.gov.lv/lv/getrevisionfile/uploads/reviziju-zinojumi/2017/2.4.1.-6\\_2017/Zin%CC%A7ojums\\_Cilve%CC%84kresursi\\_veseli%CC%84bas\\_apru%CC%84pe%CC%84.pdf](https://www.lrvk.gov.lv/lv/getrevisionfile/uploads/reviziju-zinojumi/2017/2.4.1.-6_2017/Zin%CC%A7ojums_Cilve%CC%84kresursi_veseli%CC%84bas_apru%CC%84pe%CC%84.pdf)

[4] Ibid.

[5] Order of the Cabinet of Ministers No. 359 "Public Health Guidelines 2021-2027". 26.05.2022

Latvijas Vēstnesis, 105, 01.06.2022,

<https://likumi.lv/ta/id/332751-sabiedribas-veselibas-pamatnostadnes-2021-2027-gadam>

[6] PubMed. (2017). *Global Health Workforce Labor Market Projections for 2030*.

<https://pubmed.ncbi.nlm.nih.gov/28159017/>

[7] Order of the Cabinet of Ministers No. 359 "Public Health Guidelines 2021-2027". 26.05.2022

Latvijas Vēstnesis, 105, 01.06.2022,

<https://likumi.lv/ta/id/332751-sabiedribas-veselibas-pamatnostadnes-2021-2027-gadam>

[8] World Health Organization. (2015). *WHO Global Disability Action Plan 2014-2021*.

<https://www.who.int/publications/i/item/who-global-disability-action-plan-2014-2021>; World Health Organization. (2020). *The state of the world's nursing. Investing in education, jobs and leadership*.  
<https://apps.who.int/iris/bitstream/handle/10665/331673/9789240003293-eng.pdf>

[9] The project "Reduction of fragmentation of study programmes and promotion of internationalisation of studies at Rīga Stradiņš University" (project No. 8.2.1.0/18/A/014, operational Programme "Growth and Employment", 8.2.1. specific objective "To reduce fragmentation of study programs and strengthen resource sharing" second project applications selection round).

[10] QS World University Rankings 2022.

<https://www.topuniversities.com/university-rankings/world-university-rankings/2022>

**3.1.4. Statistical data on the students of the respective study programme, the dynamics of the number of the students, and the factors affecting the changes to the number of the students. The analysis shall be broken down into different study forms, types, and languages.**

As at 1 October 2022 (in academic year 2022/2023), StP "Nursing Studies" has 474 students: 385

students in Riga, 89 students in the Liepāja Branch. 374 of them study for state budget funds and 20 students fund their education from funds of natural or legal persons.

Admission to the programme is organised electronically and on site. The report on the number of applications from academic year 2016/2017 to 2021/2022 evidences that the number applications is growing stably. This means that the StP “Nursing Studies” implemented by RSU is interesting for applicants and is recognised among students (see Table 2).

Table 2. Admission statistics to the study programme “Nursing Studies” from 2017 to 2022

Admission statistics	State-funded study places		Number of places for tuition fee		Number of submitted documents	
	Riga	Liepāja	Riga	Liepāja	Riga	Liepāja
Admission statistics in 2022	130	40	12	10	477	79
Admission statistics in 2021	104	47	12	24	398	109
Admission statistics in 2020	32	34	12	12	260	61
Fourth year of studies (specialisation)	84	70	70	60	265	11
Admission statistics in 2019	24	34	12	12	229	53
Fourth year of studies (specialisation)	84	60	70	60	324	9
Admission statistics in 2018	12	24	12	12	169	37
Fourth year of studies (specialisation)	84	60	70	60	328	6
Admission statistics in 2017	12	24	12	12	98	38
Fourth year of studies (specialisation)	84	24	70	24	238	8

The COVID-19 pandemic was not a barrier to the interest of applicants in StP or to ensuring a successful admissions process, namely, in recent years the number of applications to StP “Nursing Studies” has increased by 45-50% both in Riga and in Liepāja Branch.

The **dynamics of the number of students** enrolled in the StP “Nursing Studies” during the period from academic year 2016/2017 to academic year 2021/2022 are generally characterised as **stable, state budget places are filled in**. The number of applications of applicants tends to be

higher than planned state-funded study places. Every year, the average competition of applicants is from 1:3.6 to 1:7.4 in Riga, from 1:1.79 to 1:2.3 in Liepāja Branch. Between academic years 2016/2017 and 2021/2022 six international students were enrolled in full-time studies (outside the framework of exchange programmes), currently one international student (from India) continues studies and is approaching graduation.

The analysis of the number of graduates also evidences of stability, namely, from 67 to 126 absolventu graduates graduated from StP “Nursing Studies” annually (the highest number is 126 graduates in academic year 2017/2018). The number of graduates in all cases is higher than the number of students initially enrolled in the given year. It should be noted that the dynamics in the number of graduates are linked to the admission results of the given year of studies, for example, in academic year 2021/2022 there was the lowest number of graduates (67), as 28 students were admitted in the year of commencement of studies four years ago, that is in academic year 2018/2019, and 52 joined in later stages (see Table 3).

Table 3. Graduate count dynamics

Academic year	Faculty of Nursing Studies (Riga)	Liepāja Branch	Total
2017/2018	94	32	<b>126</b>
2018/2019	92	26	<b>118</b>
2019/2020	101	10	<b>111</b>
2020/2021	86	22	<b>108</b>
2021/2022	47	20	<b>67</b>
Total	<b>420</b>	<b>110</b>	<b>530</b>

Over the past three years, RSU, including the study programme “Nursing Studies”, has paid particular attention to reducing student drop-outs. When assessing student drop-outs, it must be concluded that they are decreasing. This can be linked to the programme’s student-centred approach and one of the measures of this approach – the introduction of a student support (mentor) system from 2022. In the Faculty of Public Health and Social Welfare, the position of a study process coordinator was introduced to support students of StP “Nursing Studies” to ensure communication with students of the study programme; obtain, update or collect the necessary information related to students or the study process; perform an analysis of students’ academic performance, drop-outs and other types of analysis as required and perform other direct duties.

Since academic year 2020/2021, supervisions have been introduced during placement in StP “Nursing Studies” (from the 1<sup>st</sup> year of studies). They are defined as a learning and professional support process involving a number of activities, providing nursing studies students with the possibility to develop and improve competences and knowledge, take responsibility for professional placement, as well as improve the quality and safety of the services provided (*Northern Ireland Practice and Education Council for Nursing and Midwifery*, <https://nipec.hscni.net/>). Supervisions are being implemented in cooperation with lecturers of the RSU Department of Health Psychology and Pedagogy so that students have the opportunity to discuss patient care in a safe, supportive environment. By participating in group supervisions, students of nursing studies are able to provide and obtain feedback in cooperation with colleagues in an effort to understand clinical matters. The main cognitive process in supervision is reflection, which takes place by reflecting on own clinical

experience, deepening understanding or identifying areas for further improvement in care.

The StP director keeps track of the reasons for the exmatriculation of students by analysing the data on a regular basis. Most often, studies are discontinued because students withdraw, which is mainly related to the economic situation of students. The second most common reason is the failure to honour the study contract.

To clarify precisely the reasons that could be prevented, the head of StP conducts individual talks with each student about possible continuation or exmatriculation to reduce student drop-outs. Every year, the highest number of student drop-outs is observed in the first year of studies. In the reporting period from 2019 to 2022, this indicator was from 8 to 23 first-year students every year. The second largest drop-out is observed in the 4<sup>th</sup> year of studies – up to 22 students per year during the reporting period. This is due both to the new (in the 1<sup>st</sup> year of studies) area of student studies and the search for their own interests and to the different level of intensity of workload and information processing intensity that have been experienced in the past. In the 4<sup>th</sup> year of studies, the biggest drop-outs are among the students who joined studies at later stages (in accordance with CM regulations, after 1st level higher education). It should be emphasised that these student drop-outs do not mean that all of them stopped studying in the study programme. A student is most often excluded from the list of students due to any reasons, but then re-enrolled. This possibility is often used by the students, who have academic failures during a semester (because they cannot combine work with studies), so they ask to exclude them to resume studies after some time.

It should be mentioned that Latvia does not collect data whether the student switches from one study programme to another, or also resumes studies after some time – there is data only about those who started studies and graduated. A comprehensive education quality monitoring system is currently being developed, which will show the path of each student. It will also help to understand and analyse the causes of discontinuation of studies.

Having evaluated the data obtained, it was concluded that it is important to inform potential students about the study environment, specifics of the field and work in the sector from the very beginning. The results obtained are taken into account when organising informative events, recruiting potential students in the programme so that potential students are able to evaluate their conformity with the requirements of the study programme and study environment.

Every year the management of the study programme is working on popularising the study programme with employers and during open days and telling about it in the mass media. RSU ambassadors, including the programme director, go to secondary schools to promote the programme (in accordance with the strategic objective of the RSU – Riga Secondary School 41, Riga Classic Gymnasium, etc.). The management of the study programme constantly pays attention to studying the circumstances of study environment and other contextual factors for the purposes of improving studies in such a way that they correspond to the needs of students.

In order to promote the nurse's profession, its competence and education process, it is planned to establish the RSU Academy of Young Nurses in 2023. This is a good chance to familiarise oneself with the nurse's profession and get the first insight into the different health care sectors, get to know the specifics of the chosen profession and motivation when starting studies. The new season will provide online and regular classes led by RSU lecturers and students of Master's StP "Nursing Studies".

Students of StP "Nursing Studies" have the opportunity to go on exchange studies or international placement for one semester or the entire academic year abroad with an Erasmus+ scholarship (<https://www.rsu.lv/starptautiska-sadarbiba/mobilitates-programmas/erasmus-programma-studentiem>). When the new Erasmus+ funding period starts, all the existing cooperation agreements will be

renewed and concluded until 31.12.2027 with 19 cooperation partners.

Previously, the number of students participating in the exchange programme tended to increase, however, this has changed in the spring semester of academic year 2020/2021 due to the COVID-19 pandemic. The forecasts that what is happening globally will have a negative impact on student mobility have also materialised in academic year 2021/2022. and although eight students of the programme had applied for mobility (two for the spring semester and six for the autumn semester), in reality no students of the Bachelor's study programme went anywhere during that period due to the COVID-19 pandemic.

The study programme "Nursing Studies" is becoming increasingly popular among international students (11 students between 2018 and 2022). This is confirmed by the fact that Erasmus+ exchange students, most often from France (*Institut de Formation en Soins Infirmiers*, IFSI Lionnois, Nancy), arrived during the pandemic. Our teaching staff have achieved this by strengthening their mutual international and scientific cooperation.

Enclosed:

Annex 16. Statistical Data on Students.

**3.1.5. Substantiation of the development of the joint study programme and description and evaluation of the choice of partner universities, including information on the development and implementation of the joint study programme (if applicable).**

Not applicable.

## **3.2. The Content of Studies and Implementation Thereof**

**3.2.1. Analysis of the content of the study programme. Assessment of the interrelation between the information included in the study courses/ modules, the intended learning outcomes, the set aims and other indicators with the aims of the study course/ module and the aims and intended outcomes of the study programme. Assessment of the relevance of the content of the study courses/ modules and compliance with the needs of the relevant industry, labour market and with the trends in science on how and whether the content of the study courses/ modules is updated in line with the development trends of the relevant industry, labour market, and science.**

See structure of content of StP "Nursing Studies" broken down by thematic blocks of courses in Table 4.

Table 4. Structure of the study program

1. Study courses	1.1. General education study courses	including humanities and social sciences courses, also study courses that develop basic social, communicative and organisational skills
		including study courses, which include business for developing professional competence
	1.2. Field-specific theoretical basic courses and information technology study courses	
	1.3. Field-specific professional specialization study courses	
	1.4. Elective courses	
2. Study placement		
3. Research papers		
4. Study courses the content of which includes the requirements of the Environmental Protection Law and the Civil Protection and Disaster Management Law		
5. State examination, which includes preparation and defence of the Bachelor's thesis		

The total volume of StP "Nursing Studies" is 160 CP (240 ECTS), the programme consists of Part A (compulsory), Part B (restricted elective) and Part C (free elective) courses. Part A of the programme consists of 146 CP (219 ECTS), Part B – 8 CP (12 ECTS), while Part C – 6 CP (9 ECTS). The programme has placement of 60 CP (90 ECTS) (in accordance with the Directive 2013/55/EU of the European Parliament and of the Council). Placement of 60 CP (90 ECTS) is divided between Part A 52 CP (78 ECTS) and Part B 8 CP (12 ECTS). The total volume of the national degree examination and the Bachelor's thesis is 12 CP (18 ECTS).

The study programme corresponds to Regulations of the Cabinet of Ministers No. 305 "Regulations on the National Standard of the Professional Higher Education"[\[1\]](#) and Regulations of the Cabinet of Ministers No. 716 "Minimum Requirements for the Content of the Mandatory Course in Civil Defence and the Content of Training of Employees in Civil Defence"[\[2\]](#).

To implement the aims to be achieved by StP, the thematic planning of the StP implementation provides that the first semesters include the fundamental theoretical study courses creating understanding of human body, physical and psychic aspects of its functioning (for example, "Biology and Medical Genetics", "Anatomy", "Functional Physiology", "Course on Pathogenesis of Most Common Diseases for Students of Nursing Studies", "Psychology and Sociology", etc.). Study courses developing communicative, pedagogical and organisational skills are implemented in all years of studies (for example, "Pedagogy in Health Care", "Organisation of Health Care", "Legal Matters of Healthcare", "Care Philosophy and Communication Skills", "Communication Psychology and Communication Skills". To ascertain the ability of students to find their way in basic theoretical study courses, as well as mastering of the industry specialisation basis, at the end of the 2<sup>nd</sup> and 3<sup>rd</sup> year of studies, students draft course papers, preparing a literature review on a topic of public health (nursing studies, public health), thereby demonstrating not only the acquired understanding of the field of health care, medicine, nursing studies, but also their skills in formulating the research matter, aim and tasks and critical analysis and systemisation of sources of information.

The share of sector-specific study courses is increasing in the range of study courses to be studied



in the next semesters (for example, “Clinical Care and Rehabilitation in Patient Care”, “Surgical Diseases”, “Internal Diseases”, “Mental Health and Patient Care”, “Oncological Diseases and Patient Care. Pain Care”, “Anaesthesiology and Intensive Care”, “Elderly Patient Care and Home Care”, as well as study courses providing skills for independent research work, which will be further needed in the development of the Bachelor’s thesis (for example, “Research Methodology”, “Statistical Methods”, “Topicalities in the Industry”, etc.).

Clinical placements are implemented in the 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> year of studies to promote mastering of students’ practical skills and knowledge. Study placements provide with the required professional skills balancing the theoretical knowledge with practical skills. Clinical placements are coordinated with the relevant study courses in the curriculum.

The content and structure of the StP is created and regularly reviewed in cooperation with employers, students, academic professionals through the work of the StP Quality Council to ensure its compliance with industry, labour market needs and scientific trends. Thus, for instance, at the work group and StP Quality Council meeting of 26.01.2020 it was decided to include new competences in study course descriptions: digital skills, leadership, human-centred care.

In the programme, it is important to ensure compliance of knowledge, skills and competences to be obtained with learning outcomes. Every year, up to 20% of content of all examinations (semester tests, examinations) in study courses is updated in accordance with RSU internal regulations, activity in a simulated clinical environment and analysis of clinical cases is included in examinations (including national degree examinations). A register of clinical skills has been created and is regularly improved, constructive cooperation with clinical placement sites (employers), professional organisations and associations of medical practitioners (Latvian Nurses Association, etc.) is maintained.

Surveys of students on the content, organisation and other topical matters of each study course of the programme are conducted at the end of each study semester to guarantee a student-centred education system. One of the main suggestions students regularly mention in the surveys is an increase in the volume of clinical placement. With these changes, students want to achieve a more complete mastering of practical skills in real working conditions, familiarisation with technologies currently in practical use in various medical treatment institutions of Latvia, familiarisation with work organisation in the work environment of a health care team, etc. The argument of higher practical preparedness of graduates of the study programme in the modern working environment is also clearly supported by the Quality Council of the study programme, the Council of the Faculty of Public Health and Social Welfare, the collegial institutions of RSU and the management of RSU. The increase in the amount of clinical study placement in study years 1-4 (from 40 CP/60 ECTS to 60 CP/90 ECTS), which provided for changes in the study programme “Nursing Studies”, is aimed at achieving all of the above objectives and generally at obtaining significantly better practical learning outcomes for graduates of the programme.

When analysing the results of student questionnaires and recommendations of employers, study methods and implementation are reviewed in study courses, not only by integrating simulation skills into practical classes, but also developing practical classes in clinical learning centres and increasing research analysis in the study process.

Each year of studies the content of study courses is improved by including the latest literature and updating the content in accordance with the current developments of the field to be covered in the study course. According to the surveys of employers and based on studies on skills needed in the labour market, it is intended to strengthen skills such as critical thinking, analysis of research articles and the ability to present an idea in writing and orally in a reasoned manner.

The study programme has been harmonised so that the study load is balanced proportionally over academic years, consecutive and successive. Based on the approved profession standard of a general care nurse and taking into account global trends and the skills needed for the profession, it should be emphasised that the study “Future of Jobs Report 2020”

([http://www3.weforum.org/docs/WEF\\_Future\\_of\\_Jobs\\_2020.pdf](http://www3.weforum.org/docs/WEF_Future_of_Jobs_2020.pdf)) of the World Economic Forum identified top 15 required skills in 2025: analytical thinking and innovation, active learning and teaching strategies, complex problem solving, critical thinking and analysis, creativity, originality and initiative, leadership and social impact, technology use, monitoring and control, technology design and programming, elasticity and stress tolerance, flexibility, reasoning and resolution of problems and creation of ideas, emotional intelligence, troubleshooting and user experience, service orientation, system analysis and evaluation, persuasion and negotiation, changes have been made to the form of implementation of individual study courses, new study courses (“Course Paper. Project Development and Financial Management”, “Course Paper – Topicalities in the Industry”, “Leadership and Effective Management”) have been created and updated, which are intended to be implemented in the third year of studies. The requirements for the implementation of placement content (skills, competences to be acquired / placement outcomes to be achieved) were updated, lecturers with significant experience in the field were involved, the integration of study and research work was fostered.

The mapping of study courses and the programme results in the inclusion of current and epidemiologically significant nosologies in study courses, emphasising examples of good practice for increasing the quality of medical treatment services and patient safety in medical treatment institutions – in four areas as a priority: oncology, cardiovascular diseases, children’s health and mental health. Changes have now been introduced to the existing programme providing for learning of more study content in courses such as “Mental Health and Patient Care”, “Oncological Diseases and Patient Care. Pain Care”, “Infectious Diseases and Patient Care”, “Placement in Patient and Society Education”, “Family Medicine”.

Study courses contain an overview of evidence-based facts and methods, the use of latest educational and research literature, simulations and other modern study system elements aimed at studies of medical topics required by society. Different e-solutions (for example, RSU e-learning website with provision of interactive online class opportunities, *Amboss* learning platform, *Panopto* video recording system) will be used to modernize the study process and to achieve better learning outcomes in the implementation of the study programme and acquisition of the study content. A rational organisation of study time in the improved study programme “Nursing Studies” and its individual courses allows preventing repetition of content, unjustifiably different interpretation, inclusion of contradictory study material in the content of courses, lack of individual topics therein. To achieve such aims, mapping of the learning outcomes of study courses against the learning outcomes to be achieved in the programme “Nursing Studies” and mapping of study courses against the requirements of the profession standard “General care nurse” and other current regulatory documents has been performed. It demonstrates the conformity of the developed planning with the profession standard of a general care nurse and the expected learning outcomes of the study programme.

The planned improvements to the programme “Nursing Studies” implemented by RSU bring the design and organisation of the programme closer to the models of “Nursing Studies” programmes of other European countries, thus significantly facilitating the mobility of students, for example within the framework of Erasmus+ activities. Mobility and the improved content of the programme implemented by RSU increase its quality, modernise it, facilitate the attraction of visiting lecturers to the programme, promote research, internationalisation and open up opportunities for the implementation of elements of joint programmes.

The content of study courses is updated in interaction of different factors. As mentioned above, StP “Nursing Studies” is implemented by professionals and experts of the Latvian health care sector with many years of experience also in the field of education and research, who continually maintain their competence, both by studying current literature in the field and by keeping up with current developments in the sector, attending thematic conferences and congresses, participating in various educational events and research projects, the results of which are further forwarded for transfer in practice. Changes and current developments in the health care sector in Latvia and the world are also being monitored. It should be noted that the programme also includes students who are practitioners with their own experience and a certain level of competence – study assignments included in study courses also include elements of critical thinking and reflection about nursing practice, which also leads to identification of issues relevant to the sector.

#### **Enclosed:**

Annex 17.1. Compliance of the Study Programme With the National Educational Standard.

Annex 17.2. Compliance of the Study Programme With the Industry-Specific Regulations.

Annex 18.1. Mapping of the Study Courses for the Achievement of Learning Outcomes of the Study Programme.

Annex 18.2. Compliance of the Qualification to Be Acquired Upon Completion of the Study Programme With the Professional Standard.

Annex 19. Planning of the Study Programme (For Each Type and Form of the Implementation of the Study Programme).

Annex 20. Description of Study Courses.

[1] Regulations of the Cabinet of Ministers No. 305 “Regulations on the National Standard of the Professional Higher Education”. 13.06.2023. Latvijas Vēstnesis, 118, 20.06.2023.,  
<https://likumi.lv/ta/id/342818-noteikumi-par-valsts-profesionalas-augstakas-izglitiba-standartu>

[2] Regulations of the Cabinet of Ministers No. 716 “Minimum Requirements for the Content of the Mandatory Course in Civil Protection and the Content of Training of Employees in Civil Protection”. 05.12.2017 Latvijas Vēstnesis, 252, 19.12.2017,  
<https://likumi.lv/ta/id/295896-minimalas-prasibas-obligata-civilas-aizsardzibas-kursa-saturam-un-no-darbinato-civilas-aizsardzibas-apmacibas-saturam>

**3.2.2. In the case of master’s and doctoral study programmes, specify and provide the justification as to whether the degrees are awarded in view of the developments and findings in the field of science or artistic creation. In the case of a doctoral study programme, provide a description of the main research roadmaps and the impact of the study programme on research and other education levels (if applicable).**

Not applicable.

**3.2.3. Assessment of the study programme including the study course/ module implementation methods by indicating what the methods are, and how they contribute to the achievement of the learning outcomes of the study courses and the aims of the study**

**programme. In the case of a joint study programme, or in case the study programme is implemented in a foreign language or in the form of distance learning, describe in detail the methods used to deliver such a study programme. Provide an explanation of how the student-centred principles are taken into account in the implementation of the study process.**

The professional Bachelor's StP "Nursing Studies" is implemented in Riga and RSU Liepāja Branch. The fulfilment of the StP is ensured by the Department of Nursing and Midwifery of the Faculty of Public Health and Social Welfare (FPHSW) of RSU, and the Liepāja Branch. For the successful implementation of the study process there is cooperation with departments of RSU FPHSW (Department of Public Health and Epidemiology, Department of Social Welfare, Department of Sports and Nutrition) and the Liepāja Branch, departments of the Faculty of Medicine (Department of Anaesthesiology and Intensive Care, Department of Biology and Microbiology, Department of Human Physiology and Biochemistry, Department of Obstetrics and Gynaecology, Department of Physics, Department of Internal Diseases, Department of Infectology, Department of Surgery, Department of Clinical Skills and Medical Technologies, Department of Neurology and Neurosurgery, Department of Pathology, Department of Radiology, Statistical Unit), Department of Pharmacology of the Faculty of Pharmacy, Department of Rehabilitation of the Faculty of Rehabilitation, Institute of Anatomy and Anthropology, Language Centre, Institute of the History of Medicine.

The StP is discussed at least once per academic year in the Nursing Studies Study Quality Council, the Council of the Faculty of Public Health and Social Welfare, changes are approved at the Dean's Council and RSU Senate.

Each study course has the leading lecturer (head of the study course), who develops and improves the study course being taught. Study courses of the study programme are reviewed and approved at department meetings. Theoretical studies (lectures) are organised jointly for several groups of students, while practical classes take place for each study group separately. It should be emphasised that most of lecturers in the programme are in the format of video lectures (in accordance with the guidelines

<https://dspace.rsu.lv/jspui/bitstream/123456789/6201/1/M%C4%81c%C4%ABbu%20video%20mater%C4%81u%20veido%C5%A1ana.pdf>).

Different teaching methods are used in the study courses according to the aim of the study course: lectures, specification of mastered theoretical knowledge on seminars, group work, analysis of problem situations and search of solutions, as well as work with the electronic library. The purpose of teaching methods is to improve the ability of students to describe and critically analyse situations and problems, using theoretical knowledge, practical skills and attitudes, to logically assess development of a situation and take decisions to deal with problems, to develop mutual communication skills, the ability to work individually and in a group in cooperation with other health and social care professionals, to improve the skills to discuss, substantiate personal opinion on public, to communicate in writing.

Even before the emergency situation – from academic year 2014/2015 – students had more than 50% of lectures as video lectures. In 2020, the RSU depository of video materials included 9845 video recordings, which include videos of lectures and different medical manipulations and recordings of sessions of scientific conferences. Most of study courses (more than 70%) at RSU have materials in the e-learning environment, which are updated every semester. In addition, several other tools related to providing the study process remotely are available in the RSU e-

learning system toolbox making it possible to perform different activities: addition of study materials; a forum for sending information and discussions; submission of students' independent work with or without checking for plagiarism (ensuring submission, correction of works, determining of the originality of content and sending of submitted papers back to students); interactive video lecture with a recording and a discussion forum; a virtual seminar in an audio or video format with a discussion between all participants; creation of electronic tests; electronic surveys; electronic voting, etc.

Given that IT solutions have been introduced in the programme and that digital transformation had already taken place, it was possible to sufficiently quickly respond to the COVID-19 pandemic and changing circumstances to reorient the operation of the programme, and even more so to create, offer new, innovative products and solutions such as video conferencing, online classes and interactive group working tools (*Zoom, Team, Miro, Nearpod, OneNote*, etc.). All these and other tools have been actively used in RSU study courses before and are actively used now. Lecturers are provided with pedagogical support materials for the implementation of a remote study process, and consultations from the RSU Information Technology Department and the Centre for Educational Growth are available to everyone.

Spring 2020 was a major challenge in the implementation of StP, when a significantly increased incidence rate of COVID-19 was detected in Latvia and elsewhere in the world and the Ministry of Education and Science of the Republic of Latvia urged higher education institutions to switch to remote studies. The first remote lectures were implemented on the next day following this appeal to prevent students from gathering in auditoriums, and additional video lectures were recorded in the next two weeks using the technological tool *Panopto*. At this time, a significant number of departments moved their work to the online environment using tools such as *Zoom* and *Microsoft Teams*.

In that period, an order was issued by the RSU Rector to implement studies in a way that prevents students from gathering during theoretical training, yet maintaining practical training in clinical courses. It should be noted that the implementation of clinical courses depends to the greatest extent on cooperation with medical treatment institutions. During the pandemic, medical treatment institutions, including major partners – Riga university hospitals, informed RSU about a total ban on students coming to hospitals and implementing their study content in clinics. Those restrictions continued in both 2020 and 2021 and partly also in 2022. In those circumstances, however, StP “Nursing Studies” continued to work without interruption and precisely according to the planning of the content of the studies, using remote study opportunities.

The Medical Education Technology Centre has made a significant contribution – its staff prepared packages with simulation materials and sent to students to their specified places of residence, which made it possible to largely compensate for the lack of regular studies, especially in study courses such as “Clinical Care and Rehabilitation in Patient Care”, “Family Medicine”, etc. Students did practical manipulation training on models at home and online with the lecturer, independently learned based on developed algorithms, recorded it on video and sent to lecturers for evaluation.

It should be noted that in October 2021 most of StP “Nursing Studies” responded to a call from the Ministry of Health and the Health Inspectorate of the Republic of Latvia to engage in care for those with COVID-19.

These examples show that, according to the planning, StP “Nursing Studies” did not stop implementing its study content even during the peak of COVID-19. As the COVID-19 pandemic restrictions eased, both the best experience of remote studies (around 20%) and resumed regular studies (around 80%) have been preserved.

When the energy crisis began in 2022 and the Cabinet of Ministers of the Republic of Latvia decided on mandatory energy savings in all state institutions at 15%, so StP “Nursing Studies” uses the experience developed during COVID-19, which allows continuous implementation of StP content according to its academic plan and wider use of remote study opportunities. It should be noted that during the energy crisis there is a possibility to implement the content of clinical courses in medical treatment institutions and the impact of the crisis on the course of studies is relatively small.

In the period since 2016, the study and assessment methods used in study courses have been critically evaluated based on the information provided in study course assessments, informal feedback from students and improvement of pedagogical competences of academic staff involved in the implementation (the staff participate regularly in training organised by the Centre for Educational Growth). In 2019-2020, and in 2021 once again, the StP was mapped and this has contributed to better compliance of study and assessment methods with StP aims and learning outcomes, as a clearer understanding of these concepts has strengthened in lecturers.

In recent years, the share of those study courses has increased, where the final assessment is cumulative and is made of the assessment of student performance during the semester. Accordingly, structured study assignments for students individually and in groups have been reviewed, clarified and created from scratch, according to the required amount of independent studies. To promote student’s responsibility and self-direction of their study process, at the beginning of study courses information on the objective, content and plan, intended final assessment, study tasks, schedule of interim reports and final reports, assessment criteria is provided. All information is available also in e-studies.

StP “Nursing Studies” has comparatively few regular lectures, most of them are video lectures or are held online. Since clinical skills are learned in practical classes – regular classes are implemented in the clinical skills competence centre (Medical Education Technology Centre), at departments of the Faculty of Medicine located in the largest medical treatment institutions, or in the form of seminars, where students report on the results of work performed independently, discuss and reflect on them, as well as receive the necessary advisory support from lecturers. Such an approach to the implementation of the study process is generally aimed at integrating student-centred studying and learning principles in the study process.

Lecturers of the study programme use several study methods in their work with students, implementing the principles of student-centred education and respecting the different learning methods and styles of students, different previous experience and knowledge, ensuring regular feedback, as well as promoting cooperation between students and lecturers; these methods are:

- interactive lectures (including discussions), which are aimed at involving students in active mastering of study substance and participation in identification of the topical public health issues, analysing them and offering solutions, discuss the future perspective of nursing studies and public health sciences, the research opportunities, to understand the role of evidence-based decisions.
- classes, seminars (including case analyses). More specific subjects are discussed in seminars and classes, including training practical skills. During the nursing studies-specific study courses, students learn to plan patient care, to gather and present health-defining information, to analyse different health problems and take actions. Students are taught to look for complex solutions for particular health problems;
- mastering of clinical skills, simulation-based education approach, which is still use more often to help students develop the knowledge and skills their need in the profession and in health care. Main aspects of integration of the simulation-based education approach into the programme: 1) efforts to improve patient safety and quality of healthcare; 2) the need to

develop communication skills and ability to work on a team in crisis situations; 3) the need to reduce the time for mastering of clinical skills in hospitals; 4) the need to ensure the readiness of learners for work in a real working environment;

- work in small groups develops students' skills of communication, cooperation, establishing dialogue, defining and expressing an opinion, as well as the ability to compromise;
- student's independent work as a study form is about 60% of the total study volume.

Independent learning of students, as well as undertaking of responsibility and control over own study process is promoted through students' independent work.

Form, organisation and test of student's independent work forms are determined and monitored by study course supervisor and lecturers involved in the study course implementation. The independent work may be, for example, preparing a research project, developing instruments for data required for research, developing and analysing a patient's clinical case, developing a care plan, analysis and assessment of a situation, analysis of a scientific article, preparing a summary of factual material, development of a preventive and education programme, etc. To improve students' independent work, study materials are placed in the e-learning environment. Students demonstrate their independent work skills during placement and writing and defending their Bachelor's theses. Student's independent work is assessed and the assessment is included in the total study course assessment received at the end of the study course.

**Studying on e-platform.** Using the e-platform (*Moodle*), students both receive lecture materials and texts used in the particular study course, thus ensuring the possibility to do study work at a convenient time, but also create and submit their independent papers devoted to analysis of specific problems in health care / nursing studies.

**Information on assessment system.** Mastering of the study programme is evaluated according to the set programme aim and tasks, as well as knowledge, skills and competences, which the student must achieve, are defined in detail in descriptions of study courses. A positive assessment must be received for the mastering of the study programme. Assessment takes place in accordance with the RSU [Academic Regulations I](#), which were approved at the RSU Senate on 23 November 2021 and are available on the university website.

At the end of all study courses, student must receive an assessment confirming the level of achievement of learning outcomes. Heads of study courses develop an examination assessment algorithm approved in the session of the relevant academic unit. Same assessment algorithm is applied to all students. Assessment methods must correspond to study course content and be able to measure the learning outcomes. The form M-3 "Study Course Description" contains the planned study course outcomes, as well as assessment criteria and test types.

Testing of students' knowledge and skills may be organised in different ways, depending on the study course specificity. This may include test work, written papers, colloquia, class tests, theoretical tests, exams, defending scientific projects, defending placements, national degree examinations, defending Bachelor's theses.

Different **tests forms** may be used in exams and theoretical tests: written or oral examination; computerised examination; combined examination. RSU Academic Regulations I contain a detailed description of organisation of exams and theoretical tests, passing requirements, and possibility of appeal.

**Assessment of course papers** is performed by a commission consisting of at least three members – lecturers from the RSU Department of Nursing and Obstetric Care and Department of Public Health and Epidemiology. 10-point system is used to assess the course paper taking into consideration both its structure, content and methodological conformity with the requirements of a



research paper, as well as student's presentation skills.

**During the placement**, student fills in a placement report. The placement supervisor assesses both practical skills and student's attitude towards the duties assigned during placement. The students get the final placement assessment in accordance with placement assessment criteria – the total assessment of the placement supervisor and the placement defence commission.

**Bachelor's theses and national degree examinations** are assessed by the commission approved by a rector's order, where at least 50% of commission members are representatives of employers.

Student may submit an appeal if he/she disagrees with the given assessment and/or file a complaint regarding assessment methods. All assessment criteria are in conformity with the Law on Higher Education Institutions, Regulations of the Cabinet of Ministers No. 240 of 13 May 2014 "Regulations on the National Standard of Academic Education", and Regulations of the Cabinet of Ministers No. 512 of 26 August 2014 "Regulations on the National Standard of the Second Level Professional Higher Education".

Assessment of students' achievements is based on the following general principles:

- transparency of knowledge and skills assessment, i.e., at the beginning of the study course, information is made available on the set of requirements to be fulfilled in order to receive a positive assessment;
- the principle of mandatory assessment – student must obtain a positive assessment on learning the content of the course, i.e., course test work and the final examination (a test or exam) must be assessed as at least "almost satisfactory" (4 points) or "passed";
- diversity of test forms – several types of tests are used in assessment of learning outcomes of courses of the study programme: written tests, tasks, situation analysis, etc., oral tests of knowledge and demonstration of skills;
- conformity – in examinations, students shall have the opportunity to demonstrate their knowledge, their analytical, creative, and research abilities, as well as course-specific skills.

Simulation-based education, which is an integral part of modern medicine, is very important in the implementation of StP "Nursing Studies". New technologies have opened up unprecedented horizons both for student preparation and for the lifelong improvement of the practical skills of already experienced nurses/health professionals. There are complex and innovative manipulations that can be refined to perfection, with the entire team (doctor, nurse) using simulation technologies and finding the most effective action algorithm for the nursing team. The correctly planned implementation of various simulations in the health education and care system significantly improves patient safety in the long term.

In 2016, work on the planning of the "Skills monitoring system" institutional level project was started at Rīga Stradiņš University within the framework of the study direction "Health Care" – its development started in 2018, while implementation started in 2020. The aim of this initiative was to develop a model of a skills monitoring system and appropriate IT solutions to ensure the identification, transparency, comparability, documenting and management of skills. The project focuses primarily on the management of practical skills specific to work and profession in the field of healthcare. In accordance with the understanding and classification of the Organisation for Economic Co-operation and Development (OECD), the skills specific to work and profession apply to the technical skills required in the workplace, which, unlike cognitive, social and emotional skills, are not relevant or applicable in all professions, but relate specifically to a particular profession.<sup>[1]</sup>

The main principles of the concept of the Skills monitoring system are 1) ensuring the quality of education in the health care study direction, 2) implementation of the simulation-based education



approach in the acquisition and assessment of skills, 3) assessment of the acquisition of skills and determination of their level, and 4) support of the IT system for strengthening skills management.

To ensure the quality of education in the RSU study direction “Health Care”, including StP “Nursing Studies”, which provides that students at stage 1 initially acquire theoretical knowledge; at stage 2, in a simulated environment students 1) appropriate the acquired knowledge, 2) acquire and improve skills, 3) demonstrate competence; at stage 3, students appropriate the knowledge, skills and competences in a real working environment under the supervision of a medical practitioner or a person entitled to train (during placement).

In order to ensure a modern and dynamic education supply based on labour market needs, implementing a joint supervision of skills, within the scope of Action 6 “Skills monitoring system” of direction I “Improvement of content of existing study programmes and its alignment with industry development needs” of the specific support objective 8.2.3 “To ensure better governance in higher education institutions” of the project “Improvement of Governance processes and modernisation of contents of study programmes at Rīga Stradiņš University” (No. 8.2.3.0/18/A/011), where lecturers of the Department of Nursing and Obstetric Care were involved, a digital skills catalogue has been developed for centralised management of skills to be learnt in RSU study programmes, as well as guidelines for the skills catalogue guidelines have been developed to support users of the skills catalogue and other stakeholders.

The skills catalogue registers and describes the clinical and pre-clinical skills defined in the Nurse’s profession standard. The tasks of the skills catalogue are to ensure 1) the registration, systematisation and categorisation of the skills to be acquired in RSU study programmes; 2) availability of information for descriptions of skills to be acquired and assessment criteria for acquisition of skills; 3) registration and editing of new skills to be acquired, including the creation of up-to-date versions of content; 4) the linking of skills with study course descriptions, study programme skills plans and confirmations of acquired skills.

**Principles of student-centred education.** Independent learning of students is promoted in the context of the RSU’s student-centred approach by clearly formulating the learning outcomes. Students are given the opportunity to familiarise with learning outcomes of the study courses, which can contribute to the possibilities of self-assessing the outcomes achieved. Emphasis is placed on making the learning outcomes of study courses linked to the results of StP studies. The formulation of learning outcomes and their accessibility to students (in e-studies under the course description) ensure that the student and the lecturer have a common understanding of what requirements the student needs to meet, what knowledge and skills should be learned so that the student can follow his/her the progress and monitor his/her learning experience independently.

Students are given the opportunity to choose which courses to learn in Part C (elective courses), based on the formulated learning outcomes. The student has the possibility to navigate through the centralised selection of Part C RSU courses to choose the most appropriate study courses for the development of professional competence in the selected profession.

When evaluating the involvement of students in the study process and in the improvement of content students have different possibilities in the achievement this goal. One of the most accessible possibilities for involvement is provision of feedback about study courses – at the end of each semester the student has the opportunity to participate in the survey on each study course.

The involvement of students in the evaluation and improvement of study content is one of cornerstones of the student-centred education approach. Therefore, in recent years, special attention at RSU and StP “Nursing Studies” has been paid to provide students with opportunities to actively participate in proposing and implementing improvements to study content. One of them is

to complete study programme and study course assessment questionnaires, which every student is asked to do during studies and immediately after graduation. Feedback from students is received and processed centrally, and this makes it possible to get the best solution to both the planning of lectures and classes and their content as a result of joint work. The RSU is also one of the few universities in Europe offering feedback from lecturers – after evaluating the results of students' questionnaires, the lecturer is urged to inform students about activities planned to implement their suggestions.

There are currently two types of assessment questionnaires available to students – for study courses and for the study programme. Questionnaires can be accessed through the e-learning platform or the RSU student portal “Universum”. Study course assessment questionnaires are generated one month after the beginning of the study course, are available throughout the study course and for another two weeks after its end. However, the study programme questionnaire becomes available immediately after the final examination, for example, defence of the Bachelor's thesis.

The results of the surveys are discussed at all levels – with students, at department, faculty, study direction, Dean's Council meetings. Each such talk has its own level of detail and purpose. Students should be provided with answers to the question what improvements are planned in the programme, while the existing shortcomings are discussed at department meetings and faculty council meetings in good faith, revealing the causes and finding solutions. Dean's Council is a platform where deans emphasise experiences that can be topical and interesting to colleagues. From the autumn semester of academic year 2019/2020, lecturers have the opportunity to electronically provide students with their comments on the results of the questionnaires and inform them about the planned improvements.

When reviewing the improvements made to the programme, it can be concluded that much of them are based on student recommendations from assessment questionnaires. Most often, improvements made on the basis of students' suggestions are related to the following aspects: changes in the sequence of study courses; planning of studies and lectures; creation of new study courses; improvement of the process of placement; change of lecturers in some cases.

Although the involvement of students of Bachelor's StP “Nursing Studies” in the survey process every year is different, an increase is also observed in involvement. For example, the activity of students of the programme increased considerably in academic year 2020/2019 (61%, in Liepāja Branch – 53%) compared to academic year 2019/2020 (58%, in Liepāja Branch – 29%). In academic year 2022/2021, total activity of students in surveys reduced (29%, in Liepāja Branch – 18%), probably due to the pandemic, which introduced new living conditions for everyone involved, therefore open communication and readiness to ask for help was emphasised as one of the preconditions for successful cooperation.

The biggest challenges are to motivation of students and technical solutions. RSU has set a very ambitious goal – to reach 60% student activity in completing questionnaires. Compared to latest indicators, this means almost doubling the number of respondents. No forced mechanisms will be sought, because this will have a negative effect on the quality of answers. Work will be done so that the student is aware of his or her opportunities to improve the study process and offer constructive ideas.

Students also have the possibility to participate in the activities of the Student Union, to apply as a candidate to the Student Union, which makes it possible to influence the study process at RSU. Until now, the students of StP “Nursing Studies” have been actively involved in the work of the Student Union. Until academic year 2021/2022, two or three students were actively involved in the Student Union and also participated in the monthly meeting of Council of the Faculty of Public Health and

Social Welfare, which directly influenced the study process in various aspects.

Three representatives of students of StP “Nursing Studies” from different years of studies and one graduate studying in Master’s StP “Nursing Studies” are approved as members of the Quality Council. Until now, student representatives have actively participated in Quality Council meetings, and the improvement of the study process and content. Communication of the student representative with students is important in order to convey information on the decisions taken at the meetings of the Quality Council.

In academic year 2019/2020, RSU conducted a survey about studies in COVID-19 conditions. This survey should be particularly noted, because it was a way to snap the situation, when both students and lecturers faced an emergency, when studies were held completely remotely, for the first time.

The social dimension was evaluated, when the RSU environment is inclusive for all students, including those with special needs. To ensure and promote the accessibility of environment at RSU, on 29 March 2021 an RSU rector’s order “Guidelines for Study and Environment Accessibility at Rīga Stradiņš University” (order No. 5-1/166/2021) and on order “Support Policy for Students of Rīga Stradiņš University with functional disabilities” (No. 5-1/166/2021) were approved[2]. Although until now (the moment of preparation of this report) the Bachelor’s study programme has not had students in a wheelchair, the physical study environment is suitable for such students, as there are elevators, ramps, etc. Values of the nurse’s profession are human rights and respect for the different, and these values are also highly valued at RSU by providing the necessary infrastructure.

Another aspect of the social dimension is the possibility to combine work with family life and studies. In accordance with CM Regulations No. 268 “Regulations on Therapeutic Expertise of Medical Personnel and Students Acquiring the First or Second Level Higher Professional Medical Education and the Extent of their Theoretical and Practical Knowledge”[3], part of students (in particular 3<sup>rd</sup> and 4<sup>th</sup> year students) start an employment relationship in healthcare institutions, which create additional challenges in the organisation of the study process. Although the planning of the programme is being improved, students face difficulties in combining work, studies and family life. This was particularly pronounced in the Covid-19 conditions, but with the support from RSU and with the commitment of students, various difficulties have been managed.

In order to promote a student-centred approach, it is important to improve the competence of academic staff, for example, lecturers may apply for Boris Teterev targeted scholarship for modernisation RSU StPs[4], as well as for Erasmus+ lecturer mobility programmes.

The innovations enriching the study process are mostly related to the extension of experience of lecturers and to the involvement of students in different academic activities. International cooperation is implemented in several aspects: 1) involvement of visiting lecturers in study courses; 2) involvement in international cooperation projects; 3) mobility of lecturers and students (Erasmus+, participation in conferences).

Students have a number of opportunities to get involved in different activities outside the study process (activities of the Student Union, hackathons and business incubators), RSU amateur bands (dance band or choir), to participate regularly in Research Breakfast, different seminars, conferences organised by RSU on a regular basis. Graduates can get involved in the Alumni Association.

**Promotion of academic integrity.** Observation of principles of academic integrity is defined in the regulations on the study procedure and regulations on academic integrity, which is available here:

[https://www.rsu.lv/sites/default/files/imce/Dokumenti/rsu\\_akademiska\\_godiguma\\_politika-21022023.pdf](https://www.rsu.lv/sites/default/files/imce/Dokumenti/rsu_akademiska_godiguma_politika-21022023.pdf).

RSU is entitled to check works submitted by the student using different methods determining violations of academic integrity, in particular using content originality and copyright determination methods (for example using the automated system it uses). RSU has introduced and uses the Unified Computerised Plagiarism Control System of Latvian higher education institutions to check originality of content of final papers. Currently RSU has signed a strategic partnership declaration with the University of Latvia and Riga Technical University, and other higher education institutions have agreed to cooperate in order to mutually coordinate principles of ethics and academic integrity.

Plagiarism is prohibited by Rīga Stradiņš University internal regulations publicly available on RSU home page. The issue of academic integrity is also considered as one of its priorities by the Student Union.

- Earlier, to check originality of work, students usually submitted their papers on a flash drive and the originality of their papers was verified manually using the Library database, which can be assessed by limited number of persons. Now everything is done through the e-learning system, where the lecturer creates a student assignment, sets a submission deadline and students upload their papers. As soon as papers have been uploaded, the system verifies their originality and prepares a report on sources, from which the content has been copied. The accessibility of the system and its user-friendliness are the reasons behind *Turnitin's* success in RSU and in other higher education institutions all over the world.
- RSU approach in using *Turnitin* to verify all student assignments, not only bachelor's and master's papers, enables it to provide support in the process and prevents situations, where plagiarism is discovered at the moment, when nothing can be done any more. News of the RSU Centre for Educational Growth indicate that development of artificial intelligence globally provides more and more options that are not limited to establishing a percentage of plagiarism of the content.
- If a student's paper shows indications of plagiarism, in accordance with the approved Annex 4 of the academic integrity policy, lecturer writes an application to the head of the study programme and head of the department. The opinion of the student is taken into consideration – he or she is invited to the department meeting to provide explanations. As a result, the student receives an admonishment and is required to rewrite the paper. In addition, the new version of the paper is graded lower than it would have been otherwise. More serious and repeated cases of plagiarism are considered by deans and even the rector and the student may face expulsion from the university. The cases, when a student of StP “Nursing Studies” would repeatedly create plagiarism, are very rare – explanatory work and the first admonishment at the department meeting usually suffice.
- Most cases of plagiarism by students are not the result of a malicious intent, it usually stems from insufficient understanding of use of references or the meaning of intellectual property – that particularly applies to first year students, who tend to use essays available on the Internet or rewrite published works without providing any reference. Therefore, RSU helps its students to learn the basics of research work, including correct usage of references.
- RSU Students Portal Development project is implemented as a part of ESF co-financed “Improvement of Governance processes and modernisation of contents of study programmes at Rīga Stradiņš University” project” (No. 8.2.3.0/18/A/011). The goal of the project is to strengthen RSU competitiveness by upgrading study curricula according to the development needs of the society and the sector, promoting the link between research and studies, as well as improving governance processes, and improving skills of the management staff.

The development of academic writing, critical thinking skills and creativity, focusing on different study courses throughout their studies, is an important deterrent to address the risks of plagiarism.

Academic writing skills can be developed by students in a separate study course/seminar and are considered to be transversal skills that are improved in different study courses. In parallel to these topics, study courses/seminars also cover issues of personal data protection, authority, conflict of interest and academic honesty in the process of scientific publication.

[1] OECD. *Skills Strategy Implementation Guidance for Latvia: Developing Latvia's Education Development Guidelines 2021-2027*.

<https://www.oecd.org/latvia/oecd-skills-strategy-implementation-guidance-for-latvia-ebc98a53-en.htm>

[2] Rīga Stradiņš University. *Accessibility at RSU*. <https://www.rsu.lv/vides-pieejamiba>

[3] Cabinet of Ministers Regulation No. 268 Regulations on the Therapeutic Expertise of Medical Personnel and Students Acquiring the First- Or Second-Level Professional Higher Medical Education and the Extent of Their Theoretical and Practical Knowledge". 24.03.2009 Latvijas Vēstnesis, 58, 16.04.2009,

<https://likumi.lv/ta/id/190610-noteikumi-par-arstniecibas-personu-un-studejoso-kuri-apgust-pirma-vai-otra-limena-profesionalas-augstakas-mediciniskas-izglitiba...%20uzs%C4%81k>

[4] Rīga Stradiņš University. *Philanthropist Boris Teterev's Target Grant for Modernisation of RSU Health Care Study Programmes*.

<https://www.rsu.lv/filantropa-borisa-tetereva-merkstipendija-rsu-veselibas-aprupes-studiju-programmu-modernizacijai>

**3.2.4. If the study programme envisages an internship, describe the internship opportunities offered to students, provision and work organization, including whether the higher education institution/ college helps students to find an internship place. If the study programme is implemented in a foreign language, provide information on how internship opportunities are provided in a foreign language, including for foreign students. To provide analysis and evaluation of the connection of the tasks set for students during the internship included in the study programme with the learning outcomes of the study programme (if applicable).**

Placement in StP "Nursing Studies" is an integral part of the study process and it is organised based on CM Regulations No. 305 "Regulations on the National Standard of the Professional Higher Education"[1], profession standard of a nurse (general care nurse), cooperation agreements between the RSU Faculty of Public Health and Social Welfare (FPHSW) and placement sites (see Annex 9.2), procedure of placement of RSU FPHSW professional Bachelor's study programme "Nursing Studies" (see Annex 9).

During placement the student should develop and strengthen professional competence to be able to implement it according to the professional standard, using technologies approved in Latvia and evidence-based practice. The aims and tasks of placement are specifically defined in each study course description.

Placement in the professional Bachelor's study programme "Nursing Studies", including in a foreign language (English), is planned by heads of study courses in cooperation with FPHSW and Liepāja Branch placement coordinators and health and social health institutions in accordance with the concluded mutual agreements.

Clinical study placement is implemented in accordance with placement agreements, which envisage provision of placement sites and include placement in health, public health and social care sectors. The study placement is organised in health and social care institutions, where students are involved in clinical work and act under supervision of the placement supervisor. At the end of each placement, students and the placement supervisor provide an assessment of the process and organisation of placement, as well as proposals on the necessary changes in the implementation of study placement.

To integrate and support students of StP "Nursing Studies", when they start or continue clinical placement in the health care system, as well as to make it possible for the future professional to accept evidence-based practice and promote professional growth, a clinical placement supervisor / mentor is designated for each student. Such a model has been practiced in StP for several academic years, and it is a successful benefit of the mentoring relationship, which increases satisfaction of students with clinical placement, improves learning skills, academic and clinical results, promotes good fellowship and creates a team.

Based on feedback from students, as well as to reduced student drop-outs during studies, supervision (1-2 times depending on the duration of placement) is provided for students of StP "Nursing Studies" during clinical placement in cooperation with lecturers of the Department of Health Psychology and Pedagogy of FPHSW. These supervisions are particularly valuable for StP students in the course of work (placement) and for the development of emotions accumulated as a result of it and "decoding" any professional doubts, fear and concerns, finding an important message he or she wants to discover through himself or herself, thus turning current obstacles into resources for professional activity. The main reason for such classes is reflection, learning through experience, concentration on work matters, improvement of professional activity, reduction of stress and burnout. The matters to be addressed can vary widely, for example, daily communication, cooperation and building relationships with colleagues, clients/patients, awareness of professional boundaries, development of different work strategies and solutions, and all other matters that arise during placement.

The total volume of placement in the professional Bachelor's study programme "Nursing Studies" is 60 CP (90 ECTS), which is implemented in the 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> academic year of studies: 1<sup>st</sup> year of studies, spring semester (2nd semester), placement I – 4 CP (6 ECTS), 2<sup>nd</sup> year of studies, semester 3, placement II – 4 CP (6 ECTS), semester 4, placement III – 6 CP (9 ECTS), 3rd year of studies, semester 5, placement IV – 6 CP (9 ECTS), and placement in patient and society education – 4 CP (6 ECTS), semester 6, placement V – 10 CP (15 ECTS), 4<sup>th</sup> year of studies, semester 7, placement VI – 16 CP (24 ECTS), and semester 8, placement VII – 2 CP (3 ECTS) and placement VIII – 8 CP (12 ECTS).

The Faculty of Public Health and Social Welfare of RSU has concluded placement agreements and cooperation agreements (64 in total), successful cooperation has established with VSIA "Bērnū klīniskā universitātes slimnīca", SIA "Rīgas Austrumu klīniskā universitātes slimnīca", SIA "Rīgas Dzemdību nams", VSIA "Rīgas psihiatrijas un narkoloģijas centrs", VSAC "Rīga", RSAC "Gaiļezers", SIA "Jelgavas pilsētas slimnīca", VSIA "Slimnīca Ģintermuiža", SIA "Ziemeļkurzemes slimnīca", SIA "Kuldīgas slimnīca", SIA "Rēzeknes slimnīca", SIA "Liepājas Reģionālā slimnīca", SIA "Daugavpils Reģionālā slimnīca", SIA "Mājas aprūpe", SIA "Veselības centrs 4", SIA "Vidzemes slimnīca", AS "Veselības centru apvienība" and other medical treatment and social care institutions, as well as with many family doctor practices.

Along with the above-mentioned health care facilities, placement of students is ensured in cooperation with rehabilitation centres VSIA "Nacionālais rehabilitācijas centrs "Vaivari"" un SIA "Rehabilitācijas centrs "Līgatne"", as well as practices of physiotherapists and rehabilitation

departments of the above-mentioned university and regional hospitals. To implement placement in patient in society education agreement were concluded with non-governmental organisations: Latvian Red Cross, Society "Saule" (organisation for people with intellectual development disorders), society "Svētā ģimenes māja", etc.

In 2021, a scholarship fund to reduce the spread of Covid-19 infection in emergency conditions was established, and in 2022 scholarships were provided to health care students, including students of StP "Nursing Studies", for voluntary works in health care facilities of the Republic of Latvia, at the same time mastering part of the educational study programme in a working environment.

**The aims and tasks of study placement are related to the learning outcomes of the study placement and the study programme.**

To achieve the objectives of the strategy, it is planned to continue cooperation with the abovementioned sectoral organisations, as in this way we will keep covering all regions of Latvia and provide all students of the programme with the possibility to benefit from a wide range of placement sites. It will also become a contribution and support of RSU to the health care sector for the much-needed further regeneration of human resources.

StP tries to keep in touch with employers on a regular basis inviting them to career days or going to employers' career days, seminars or conferences. StP lecturers are health care practitioners who have strengthened their professional careers in Latvian university hospitals and major medical treatment institutions. Lecturers actively cooperate with employers and professional associations (Latvian Nurses Association, Healthcare Employers' Association, Latvian Association of Large Hospitals and Association of Healthcare and Employers). Some of the lecturers of the Department of Nursing and Obstetric Care are on the board of the Latvian Nurses Association and its members. It is planned to continue cooperation with the Latvian Nurses Association and participate in activities organised by it. There is also a successful cooperation with the Ministry of Health of the Republic of Latvia in the examination, analysis and drafting of strategic documents in the field of education.

International cooperation is an essential part of any modern education institution, as it enriches participants both intellectually and mentally, fostering the creation of new projects and the development of innovative ideas. Active participation in international mobility projects enables StP students to participate in an exchange placement in one of the healthcare institutions of the cooperation countries, to supplement knowledge and gain valuable experience in healthcare institutions of other countries, as well as to develop communication skills and linguistic competences.

Thanks to the participation of the Department of Nursing and Obstetric Care in international projects, lecturers and administrative staff of the StP also go on experience exchange trips, thus not only facilitating the establishment of new contacts, but also expanding the range of cooperation partners.

Enclosed:

Annex 9.1 – Procedure of organisation of placement in the professional Bachelor's study programme "Nursing Studies" of RSU Faculty of Public Health and Social Welfare.

Annex 9.2 – information on agreements and other confirmations about the provision of student placements in companies.

[1] Regulations of the Cabinet of Ministers No. 305 "Regulations on the National Standard of the Professional Higher Education". 13.06.2023. Latvijas Vēstnesis, 118, 20.06.2023., <https://likumi.lv/ta/id/342818-noteikumi-par-valsts-profesionalas-augstakas-izglitiba-standartu>

### **3.2.5. Evaluation and description of the promotion opportunities and the promotion process provided to the students of the doctoral study programme (if applicable).**

Not applicable.

### **3.2.6. Analysis and assessment of the topics of the final theses of the students, their relevance in the respective field, including the labour market, and the marks of the final theses.**

The development of the Bachelors thesis in the professional Bachelor's StP "Nursing Studies" shows the theoretical knowledge of the candidate for a Bachelor's degree in nursing studies, the ability of the student to use the mastered learning material, to work independently with scientific literature and research work methods, the skill to analyse data and draw conclusions. A Bachelor's thesis is a student's independent research of a problem in nursing studies and is a mandatory part of the study programme.

The requirements to Bachelor's thesis and its assessment at RSU are laid down in the [Regulations on Writing and Defence of Qualification Paper, Student's Research Paper, Bachelor's Thesis and Master's Thesis](#) (approved by RSU Senate on 10.11.2020). In accordance with the requirements of the above-mentioned regulations Methodological instructions on the development and defence of students' final papers at the Department of Nursing and Obstetric Care of RSU Faculty of Public Health and Social Welfare have been developed (approved at the Public Health and Social Welfare Council meeting on 15 June 2020). It is also regulated by the Procedure for Submission and Storage of Electronic Versions of Student Qualification Papers, Bachelor's Theses and Master's Theses or other Final Papers in RSU Open Access Institutional E-Resource Repository", as well as Rīga Stradiņš University Academic Regulations I. These documents are available electronically on the RSU website in Latvian (<http://www.rsu.lv/par-rsu/normativie-akti-un-dokumenti>) and in [English](#).

The thematic areas of the Bachelor's thesis available and the scientific supervisors thereof are offered to students of the professional Bachelor's study programme during semester 6. Thematic areas of Bachelor's theses are offered not only by the Department of Nursing and Obstetric Care, but also by several RSU structural units (for example, the Department of Public Health and Epidemiology, the Institute of Occupational Safety and Environmental Health, the Department of Health Psychology and Pedagogy, etc.). Thematic areas of the Bachelor's thesis to be offered to students are examined and supplemented with recommendations regarding the latest developments in the field of nursing studies and healthcare at the Study Programme Quality Council, which includes representatives of employers, thereby ensuring the linking of research with the labour market and latest developments in the field of healthcare and nursing studies.

Students have the right to offer their own research topic and choose a thesis supervisor who agrees to supervise his or her Bachelor's thesis. The supervisor of a Bachelor's thesis needs a scientific Master's or doctoral degree. The topic and scientific supervisor of a Bachelor's thesis are approved at the faculty council meeting six months before the expected defence of the paper.

In order to promote students' understanding of the research methodology and make them familiarise with different studies, StP lecturers were urged to include the analysis of research in the content of their courses, and to provide assignments developing analytical skills as part in



independent work. Students of the programme start research activities by initially learning study courses “Evidence-Based Nursing”, “Course Paper in Public Health”, “Course Paper – Topicalities in the Industry”, “Basic Statistics”, “Research Methods” and writing a course paper.

The Bachelor’s thesis is defended under the supervision of a state commission. The commission includes the head of the commission representing nursing studies – health care field of science from an institution independent of RSU. According to the regulation (CM Regulations No. 512), at least half of the commission members are representatives of professional organizations or employers in the field, as well as lecturers of the RSU Department of Nursing and Obstetric Care.

The scientific research interests of students are defined in accordance with the developments in the nurse’s profession, health care policy guidelines and the individual professional interests of students. The following thematic areas of research are relevant to the specificities of the StP: modelling the interaction between a nurse and a patient to promote compliance in the care process; problems in the field of healthcare – changing demography, changing patterns of treatment and care for diseases, changing roles and expectations of care; quality of care, development, monitoring of quality of care criteria; quality indicators in care; patient safety in the care process; nurses-leaders in patient safety culture; role of nurse leaders; occupational and environmental health issues (safety, workload, prevention); improving health and quality of life; interdisciplinary cooperation in care; mentoring in healthcare and professions; introduction of new materials and technologies in tertiary care (adaptive viscoelastic materials, automated hospital management); E-Health; development of telemedicine and possibilities of care; technological innovation in healthcare; innovative technologies and digital skills in the care process / nursing education. The thematic areas are published on the website of the RSU Department of Nursing and Obstetric Care

<https://www.rsu.lv/maszinibu-un-dzemdibu-aprupes-katedra/nosleguma-darbu-tematiskas-jomas>.

The students’ Bachelor’s theses drafted during the reporting period (academic years 2016/2017-2021/2022) can be grouped into several thematic areas.

1. Improving healthcare and quality of life: Quality of life of women during menopause, Factors affecting quality of life for social care and social rehabilitation clients, Health-related quality of life in patients with chronic back pain, Health-related lifestyle for patients after myocardial infarction, etc.
2. Occupational and environmental health issues (safety, workload, prevention): Determining the psychological climate at workplace for nurses, Understanding patient safety aspects in practice of surgical nurse, Impact of working hours on nurse’s individual fatigue, Relationship between patient safety and burnout syndrome for nurses practicing in intensive care units, etc.
3. Modelling of nurse-patient interaction promoting compliance in the care process: Compliance of psychiatric patients in the use of prescribed medicines, Level of compliance in the treatment process in patients with gastroesophageal reflux disease, Compliance of patients in secondary prevention after myocardial infarction, etc.
4. Health disruptive factors and problems (addictions, violence, etc.): Health habits in patients with diagnosed primary arterial hypertension, Detection of the risk of malnutrition in acute patients in the surgical department; Quality of sleep among nurses of different specialties, Habits of use of over-the-counter medicines in residents of Liepaja, etc.
5. Patient experience in the healthcare process and person-centred healthcare: Spectrum of healthcare services in a family doctor’s practice in South Kurzeme Municipality, Satisfaction of patients with COVID-19 with the provision of information in their family doctor’s practice; Incomplete patient care and reasons in hospital cardiology units, etc. (See Annex 22 “Topics of final papers of students in the professional Bachelor’s study programme “Nursing

Studies”).

Innovative topics of final papers and the ones studied once relate to the following aspects: support measures for new employees (those starting professional careers), patient experience in the healthcare process, process of person-centred care, integration of technology into nurse’s professional work, etc.

Since 2020, the topic of the COVID-19 infection, its impact of the healthcare system and public health in Latvia has become popular in Bachelor’s theses.

A number of researches emphasise topics that are relevant to the labour market: what is the availability and quality of healthcare services, how to improve the organisational aspects of nursing work, the barriers to evidence-based nursing practice, chronic patient care management, information management in the health system, digital solutions in nursing practice, human resources management. The weighted average grade for final papers over the last five years fluctuated from 7.3 to 7.83. Almost every year at least one student receives the highest assessment (10). The fact that this assessment is not achieved often only confirms the serious attitude of the Bachelor’s Thesis Commission in assessing the performance of each student. There have been no poor assessments in the past three years.

To successfully defend a final paper, there is a pre-defence process during which the student presents the analysis of the theoretical part of his or her research, receives recommendations from the commission to improve the paper, further progress and defence of the final paper.

Students are motivated to participate in scientific conferences with poster presentations, theses, as well as cooperation with the Latvian Nurses Association and employers on final research paper theses at association seminars and conferences is promoted (for example, on 26 October 2022, P. Stradins Clinical University Hospital in cooperation with the University of Latvia and the RSU “Topicalities in Evidence-Based Clinical Nursing Practice”).

Enclosed:

Annex 22. Topics of final papers and assessments of final papers of students.

### **3.3. Resources and Provision of the Study Programme**

**3.3.1. Assessment of the compliance of the resources and provision (study provision, scientific support (if applicable), informative provision (including libraries), material and technical provision, and financial provision) with the conditions for the implementation of the study programme and the learning outcomes to be achieved by providing the respective examples.**

The premises ensuring the study process (mainly at Anniņmuižas bulvāris 26a, Dzirciema iela 16 and Liepāja Branch) are modern, well-equipped – each room as has a computer with internet connection, a projector, and an interactive board. The premises have good lighting and are warm in the cold months of the year. To prepare study work, students have the possibility to download *MsOffice* software free of charge on their personal computers for study work and use the *SPSS (Statistical Package for the Social Sciences)* software. Free internet, as well as publicly available computers with internet connection (located in different places in the building), are available to

students in premises of the higher education institution. Common use premises have recreational areas, microwave ovens, various vending machines, also a cafeteria are available to students.

The study base formed for the study direction is used for providing the StP – library, classroom, technical supplies (for example, the possibilities offered by the Medical Education Technology Centre, the Anatomical Theatre, the Department of Occupational and Environmental Medicine, etc. – replicas, simulations, technical equipment for different laboratory work, etc.), computers, cameras, internet connection, etc. Specific learning resources are almost entirely provided in e-learning, including descriptions of study courses, tasks and tests, if any, as well as required readings. Educational literature is mostly provided through e-books and e-journals or by scanning key pieces of text and by placing in e-learning, using internet sources to provide students with the possibility to read on e-devices (however, in some cases teachers specifically ask students to work in the library).

The simulation-based medical education approach implemented at the RSU Medical Education Technology Centre (METC) and the RSU METC is a significant resource of StP. The simulation-based education approach makes it possible to systemically evaluate the scope and quality of theoretical knowledge, determine the actual level of skills and forecast the quality and compliance of performance with the real working environment in a safe and controlled environment.

From 2018, an Open Access Loan of the library is available to RSU students and employees 24/7, for other users working hours are: Monday-Friday 8.30–19.00, Saturday 10.00–17.00. The total area of library premises is 2282 m<sup>2</sup>, including premises to serve readers – 1498 m<sup>2</sup>. Library users have access to 308 reader places, 89 computer workplaces, and wireless internet.

From 2016, after reconstruction users have access to well-equipped, vast premises on Floor 1 of the library in the Open Access Loan, which provide the possibility to get all loan books for home use, using self-service equipment. Open access loan also includes reading rooms for group work and individual work.

The library is located in the main RSU building Riga, Dzirciema iela 16, building G (Floor 2), it has three branches:

- two in Riga: in the RSU Red Cross Medical College Information Centre for Latvian health care specialists J. Asara iela 5 and in the Medical Education Technology Centre at Annīņmuižas bulvāris 26a;
- one in Liepāja: RSU Liepāja Branch library (Riņķu iela 24/26). The library provides lecturers and students with access to Latvian and international electronic resources, including information in public health areas.

Information on the services, resources, service points, and other questions can be found in the Library section of RSU website in Latvian and English.

The SPSS software is available on computers in the library. It should be noted that the Statistical Unit, by promoting the scientific activities of RSU students and lecturers, offers consultations on research methodologies, data input, the use of data processing programmes, methods of statistical processing of data, analysis, interpretation and graphic presentation of results.

Funding for purchasing scientific literature for programmes of the health care direction is awarded to the RSU Library in the budget every calendar year. This does not limit the use and added value of scientific literature for students of different StP.

Any lecturer involved in the implementation of StP “Nursing Studies” have the opportunity to propose some literature they consider necessary and fill out the RSU form BK-1(5). Twice a calendar year, lists of scientific literature are drawn up and submitted to the RSU Library, followed by the

purchase of the scientific literature. If budget funds are sufficient, additional funding may be granted to books. Such activities provide access to the latest scientific literature in the sector in printed form.

It is important to note that RSU is subscribed to a number of databases, which also provide industry-relevant literature. Students and lecturers have access to 28 online databases: *AMBOSS* (medical learning system platform), *ClinicalKey*, *AccessMedicine*, *Ebook Central (ProQuest)*, *BMJ Journals*, *SAGE Premier 2018* collection of journals, *Wiley Online Journals*, *PsycARTICLES*, *EBSCO* (several academic databases), *The Cochrane Library*, *DynaMed Plus*, *ProQuest* collection of journals *Health Research Premium Collection*, *Science Direct* collection of journals, *SCOPUS*, *Web of Science*, *ProQuest Dissertations & Theses Global: The Sciences and Engineering Collection*, *Letonika*, *LETA* news archive, *Nozare.lv*, etc (see <https://www.rsu.lv/biblioteka/resursi>).

Medical and also nursing sector subscribed databases *Elsevier ClinicalKey* and *McGraw-Hill AccessMedicine* provide unlimited number of RSU users with the main study literature and manuals both in medical base sciences and various specialities. Multidisciplinary subscription databases *Ebook Central (ProQuest)* and *EBSCO eBook Academic Collection* offer e-books in different fields and from publishers and provide selected information results searching by various topics and keywords. In general, the level of usage of these databases is high. It is evaluated once a semester. Statistics indicators of usage tend to increase. Within the last two years usage statistics indicators have especially increased for e-book databases *ClinicalKey* and *AccessMedicine* (on average by 1.3 times).

In addition, one of the departments of the Library of Rīga Stradiņš University is also the World Health Organisation (WHO) Depositary Library in Latvia. The Depositary Library contains materials on the WHO activities in the field of health protection all over the world, WHO bulletins, regulatory enactments, statistical data, reports and publications on AIDS and its control, alcohol abuse and smoking, cardiovascular diseases, environment and society, mother and child health, oncological and infectious diseases, mental health, nutrition and food safety, water supply and sewage, and other health care, environmental and social matters.

At the beginning of the implementation of each study course, the head of the study course, together with library colleagues re-organises the e-learning website, updating tasks and lists of readings. In order to improve the compliance of the library collection with the needs of students lists of study course readings are revised, there is cooperation with university lecturers to inform about the situation with supplies of study course literature and popularise e-resources, while users have the possibility to fill an electronic questionnaire for supplementing the library collection. The lecturer continues to work on the website during the implementation of the study course, using it also for communication with students, notices and answers to questions. In order to ensure deeper integration of the e-environment in the study process, there are plans to develop the diversity of tools offered by the *Moodle* environment – to diversify tasks and forms of communication.

Due to the announced Covid-19 pandemic, from 11.03.2020 restrictions have been set in the organisation of the study process by a RSU rector's order – regular lectures have stopped. The study process continued using the e-studies environment and IT tools. It should be noted that RSU quickly responded to the changed reality and provided all lecturers with regular IT training on the use of different platforms and tools. The RSU Information Technology Department continued training lecturers also in academic year 2022/2023. Lecturers had the possibility to apply for individual consultations with IT specialists without restrictions. Informative meetings were organised for students by the management and the department to explain what was going on and to talk about potential future development scenarios.

The Student Union provided an opportunity to apply for those 1<sup>st</sup> year students, who did not have

computer equipment, as well as allowed them to stay in RSU premises to participate in remote lectures and classes, if they did not have such an opportunity at home. Lecturers were also supported with computer equipment and cameras. Those lecturers, who did not have the technical supplies, could receive it from RSU, as well as read lectures and classes from RSU premises.

Different RSU departments and structural units (Centre for Educational Growth, Doctoral School, Information Technology Department) offer different continuing education and professional improvement opportunities on different topics, for example, mastering of digital tools, mastering of interactive methods, preparation of scientific articles, information on different databases, platforms for use of references, opportunities provided by different platforms, etc. For example, in academic year 2021/2022, to respond to the rapidly changing study environment, the Centre for Educational Growth organises training on hybrid studies helping lecturers to understand the combined study process, when lectures and classes should be read to those, who are in the auditorium, and to those, who study remotely.

RSU also organises the Research Breakfast inviting lecturers, students and other interested persons to participate and including different topics. For example, to present the performance of RSU in the national research programme “Life with Covid-19”, research data were actively presented at several Research Breakfasts in academic year 2020/2021.

Taking care of mental and physical health of employees, RSU offers to attend the gym, as well as organised sports classes for lecturers at the Faculty of Continuing Education. Covid-19 affected the possibilities to attend sports classes, but the welfare of RSU employees is still a priority. During the Covid-19 pandemic, in cooperation with the [Department of Psychosomatic Medicine and Psychotherapy](#) employees and students were offered to receive consultations for the preservation and improvement of mental and physical health.

All course descriptions, study literature and additional sources of information are available to students remotely in the e-environment, incl. also interactive study material learning activities (for example, HP5, etc.). All scientific literature is available to students in smart devices, thus ensuring maximum student-centred approach and promoting self-directed learning to make students direct the study process themselves.

The quality of the study programme and very good material, technical (also in the Liepāja Branch) and methodical provisions make it possible to intensify the study programme in a foreign language in the future and attract students from abroad. Working with foreign partners, including healthcare facilities, means opportunities for expanding placement sites abroad as well.

Enclosed:

Annex 23.1. Assessment of the informative and methodological provision regarding Library resources for the implementation of the study direction “Health Care” in accordance with the requirements of the guidelines

### **3.3.2. Assessment of the study provision and scientific base support, including the resources provided within the framework of cooperation with other science institutes and higher education institutions (applicable to doctoral study programmes) (if applicable).**

Not applicable.

**3.3.3. Indicate data on the available funding for the corresponding study programme, its funding sources and their use for the development of the study programme. Provide information on the costs per one student within this study programme, indicating the items included in the cost calculation and the percentage distribution of funding between the specified items. The minimum number of students in the study programme in order to ensure the profitability of the study programme (indicating separately the information on each language, type and form of the study programme implementation).**

The StP is planned to be financed from state budget funds and the funds of individuals and legal entities setting the tuition fee in the Latvian flow in accordance with the state budget funding without social security of EUR 5705, in the English flow – EUR 7500 per year of studies. The tuition fee can be subject to discounts in accordance with internal norms and regulations. The number of students planned to be achieved in the Latvian flow in four years of studies is 508 students, enrolling 144 students in the first year, planning a drop-out of 18 students in the second year, a drop-out of 6 students in the third year and with the number of students remaining unchanged in the fourth year. Such a number of students is optimal to ensure a high-quality study process and to make the study programme cover its implementation, as well as development costs. Meanwhile, the study programme in the English flow, which lasts four years, will be able to cover implementation and development costs, if a total of 52 students are enrolled, who pay a tuition fee of EUR 7500 per year.

Funding is used for staff remuneration, attraction of visiting lecturers, taxes, maintenance of IT infrastructure, purchase of equipment and devices. In addition to the direct costs of the implementation of lectures and classes, the StP must cover the infrastructure maintenance costs (facilities, IT solutions) and other RSU common resources used in StP (Student Service, Library, organisation of the study process, grant for the Student Union and other support and administrative functions).

StP is implemented by the RSU Faculty of Public Health and Welfare Department of Nursing and Obstetric Care, Department of Health Psychology and Pedagogy, Department of Public Health and Epidemiology and Department of Welfare and Social Work, Faculty of Medicine Statistical Unit, Department of Biology and Microbiology, Institute of Anatomy and Anthropology Department of Morphology, Department of Pathology, Department of Anaesthesiology and Intensive Care, Department of Human Physiology and Biochemistry, Department of Physics, Department of Internal Diseases, Department of Surgery, Department of Clinical Skills and Medical Technologies, Department of Pathology, Department of Radiology and Department of Neurology and Neurosurgery, Faculty of Pharmacy Department of Pharmacology, Faculty of Rehabilitation Department of Rehabilitation, Language Centre and RSU Liepāja Branch. Remuneration of the academic staff in the first year of the Latvian flow StP is planned to be approximately 300 thousand EUR and approximately 49 thousand EUR in the English flow study programme.

Table 2. **Information on student costs**

**Costs of the study programme in the Latvian flow**

Name	Result with the existing tuition fee
Average income per student, EUR	5536

Average cost per student, EUR	5392
Academic staff, %	39
Department resources, %	5
Students' clinical training and placement, %	1
Other direct expenditure, %	1
Scholarships, %	5
Fixed costs, %	5
Overheads, %	44

#### **Costs of the study programme in the English flow**

<b>Name</b>	<b>Result with the existing tuition fee</b>
Average income per student, EUR	7036
Average cost per student, EUR	6717
Academic staff, %	49
Department resources, %	3
Students' clinical training and placement, %	1
Fixed costs, %	4
Overheads, %	43

Taking into account the number of students in the programme (as at February 2023 – 474 students), the financial provisions of the study programme are sufficient.

### **3.4. Teaching Staff**

**3.4.1. Assessment of the compliance of the qualification of the teaching staff members (academic staff members, visiting professors, visiting associate professors, visiting docents, visiting lecturers, and visiting assistants) involved in the implementation of the study programme with the conditions for the implementation of the study programme and the provisions set out in the respective regulatory enactments. Provide information on how the qualification of the teaching staff members contributes to the achievement of the learning outcomes.**

Chapter IV of the Law on Higher Education Institutions sets requirements for candidates for the positions of academic staff.<sup>[1]</sup> The procedure for the application and selection of academic staff at RSU is governed by the “Regulations of Rīga Stradiņš University on academic positions” and “Process of Rīga Stradiņš University “Elections of Academic Staff”” and the following general requirements: knowledge of the official language in accordance with the requirements of regulatory enactments of the Republic of Latvia; knowledge of foreign languages at a level sufficient to occupy an academic position (including leading classes in that language); continuous improvement of their academic, scientific and pedagogical qualifications.

RSU structural units, heads of structural units involved in the implementation of StP particularly value to succession issues and interaction between staff of different generations. In order to improve the content of the study programme, as well as to introduce innovative methods in study processes, RSU involves foreign visiting academic staff. The process of recruitment and evaluation of lecturers is transparent, effective and one of the preconditions for high quality of the study process. At the study programme level, the duty of the head of the study programme is to ensure compliance of the content of the study programme with internal and external laws and regulations, requirements of the labour market, sectoral development trends and needs of students, to analyse the data that might provide information on the factors affecting results and quality of the study programmes, and to implement necessary improvements to the study programmes. At the study programme level, quality indicators of the study programmes are measured that are directly linked to remuneration of the heads of the study programmes. This aspect promotes taking responsibility and motivates the head of the study programmes to achieve higher defined quality standards. At RSU level, the duty of the management is to set strategic and quality aims and quality policy, to make a decision on the quality approach, to manage resources, and determine the internal procedures. Supervision of the system introduced at RSU is performed by both the internal system and quality auditors and independent external experts. At the university level, one of the indicators of study quality is the public attitude and opinion, as well as the popularity of RSU. It is regularly established by participating in a reputation survey and evaluation of brands.

The implementation of study courses in StP “Nursing Studies” is mainly ensured by the Department of Nursing and Obstetric Care of the Faculty of Public Health and Social Welfare, but main basis study courses also by other RSU structural units: [Language Centre](#), [Department of Public Health and Epidemiology](#), [Department of Health Psychology and Pedagogy](#), almost all departments of the Faculty of Medicine, including [Department of Clinical Skills and Medical Technologies](#), [Statistical Unit](#), etc.

The composition of teaching staff in the study programme is stable. Lecturers have both academic and practical work experience in health care sectors, including in the field of nursing studies. In the reporting period, changes in academic staff have occurred among both permanent lecturers and invited teachers. The changes are related to ensuring succession and interaction between generations.

Highly qualified lecturers – academics and practising specialists – participate in the implementation of StP “Nursing Studies”. 123 lecturers are involved in the implementation of the professional Bachelor’s study programme “Nursing Studies”, more than 50% of which have been elected to RSU academic positions (see Annex 24.7), as well as invited teaching staff from the field of health care and support staff. It should be noted that the lecturers involved in the implementation of StP are experts of the Latvian Council of Science (for example, prof. Inga Millere, assoc. prof. Oļegs Sabeļņikovs, assis. prof. Velga Sudraba, assoc. prof. Liāna Deklava, prof. Ivars Vanadziņš).

The Department of Nursing and Obstetric Care (DNOC) prevails in the implementation of StP, its lecturers are industry professionals with Master’s and doctoral degrees in health care and related



sectors. This will make it possible to ensure high quality lectures, classes, seminars and simulations for students of all years of studies. To promote the achievement of the aim of the study programme and learning outcomes, lecturers with extensive academic and professional experience are involved in teaching of study courses. The lecturers' experience and employment in health care makes it possible to include latest development in health care, including nursing, in study courses, reflect the existing situation in the sector, as well as make it possible for students to integrate evidence based care principles when writing study papers. When students get to lecturers of clinical courses, they meet industry experts and professionals with long clinical work experience ensuring integration of theoretical and clinical knowledge. Clinical placements ensured by the leading medical treatment institutions in the capital and in regions help to strengthen it.

To promote the development of academic discipline, five DNOC lecturers (Kristaps Circenis, Agita Melbārde-Kelme, Olga Fokina, Rita Konstante and Gunta Bēta) completed doctoral studies and defended their doctoral degree, while three DNOC lecturers have started and continue doctoral studies. Changes in the composition of teaching staff are planned in a targeted way, from 2016 the number of personnel elected to academic positions and also visiting lecturers (teachers) has increased due to the increase in the number of students in the programme.

DNOC is open to new assistants, lecturers, assistant professors in response to the growing number of students in the programme. There are a number of new lecturers who have started work at the department during the reporting period: acting assistant started working in study courses Clinical Care and Rehabilitation, Evidence-Based Nursing and Professional Work, Leadership and Effective Management. One lecturer with a doctoral degree started working and participates in the implementation of the course Research Methods. He did not work at the university before that. It should be noted that several lecturers stopped working at the department and focused on clinical work in their main job. In the reporting period from 2016 to 2022, one lecturer was elected (re-elected to the next term), one assistant professor was re-elected, three assistant professors were re-elected to the next term (see Table 6).

*Table 6. Number of teaching staff of the Department of Nursing and Obstetric Care during the reporting period from 2016 to 2022*

	<b>2016/ 2017</b>	<b>2017/ 2018</b>	<b>2018/ 2019</b>	<b>2019/ 2020</b>	<b>2020/ 2021</b>	<b>2021/ 2022</b>
Professor	1	1	1	1	1	1
Associated professor	1	1	1	-	-	-
Docent	3	3	3	4	4	5
Acting assistant professor	-	-	-	-	-	-
Lecturer	2	2	1	1	1	1
Acting lecturer	2	2	2	2	2	5

Assistant	-	-	-	-	-	-
Acting Assistant	12	14	15	17	18	19
Lesson teacher (Professor)	1	-	2	2	-	-
Lesson teacher (asoc.profesors)	-	2	2	4	3	2
Lesson teacher (docents)	2	4	8	10	7	5
Lesson teacher (Acting assistant professor)	-	-	1	1	-	2
Lesson teacher (Lecturer)	-	-	-	-	1	1
Lesson teacher (Acting lecturer)	1	1	1	1	2	-
Lesson teacher (Assistant)	-	-	-	3	5	4
Lesson teacher (Acting Assistant)	2	2	5	4	5	3
Lecturer	132	149	156	151	177	229
Senior lecturer	2	4	1	2	4	3

Specialists invited from different areas, for example, IT/e-health specialists (agreement with SIA "Meditec", Mārtiņš Sils) or psychologist and coaching trainer Undīne Bušmeistere provide a significant overview of developments in health care and nursing studies, international and intercultural aspects, as well as those areas, which are currently very important in understanding the patient-centred care approach, modelling, explaining of problems, as well as practical activity, where the teaching staff of the department still misses expertise in the study programme.

Foreign lecturers should be emphasised in the implementation of the StP, who both provide students with a different view of what is happening in Latvia with international context and make a valuable contribution to the content of the study programme. Here, first of all, it is important to mention the visiting professors who read visiting lectures and visiting lecturers who are invited to teach certain study courses for the exchange of experience, as well as sectoral specialists from Latvia and foreign experts, whose valuable lectures and seminars help to obtain a multifaceted view of problems, a more precise focus, detailed overview in specialisations, the ability to find and solve problems in real environment examples.

During the reporting period, visiting lecturer from the United Kingdom Dace Dimza-Džonsa, was involved in teaching study courses. She has extensive experience in leading clinical trials (in the

study course – “Course Paper – Topicalities in the Industry”, “Leadership and Effective Management”). There were also visiting lecturer from Finland Arja-Irene Tiainen (in the study course “Research Methods”) and visiting lecturer from Canada Lolita Baiba Zariņš (in the study course “Course Paper – Topicalities in the Industry”, “Bachelor’s Thesis” (see Table 7).

Table 7. Visiting lecturers in the professional Bachelor’s study programme “Nursing Studies”

<b>Position</b>	<b>Country of residence</b>	<b>First name</b>	<b>Surname</b>	<b>From</b>	<b>Up to</b>
Lecturer	Lielbritānija	Dace	Dimza-Džonsa	12.09.2022.	31.01.2023.
Senior Visiting Lecturer	Kanāda	Lolita Baiba	Zariņa	01.06.2022.	30.06.2022.
Senior Visiting Lecturer	Kanāda	Lolita Baiba	Zariņa	01.06.2021.	30.06.2021.
Visiting lecturer	Lielbritānija	Dace	Dimza-Džonsa	07.12.2020.	30.12.2020.
Senior Visiting Lecturer	Kanāda	Lolita Baiba	Zariņa	01.06.2020.	14.06.2019.
Visiting lecturer	Lielbritānija	Dace	Dimza-Džonsa	21.10.2029.	04.11.2019.
Senior Visiting Lecturer	Kanāda	Lolita-Baiba	Zariņa	13.05.2019.	14.06.2019.
Visiting lecturer	Somija	Pemilla Catharina	Stenback	24.09.2018.	12.10.2018.
Visiting professor	Lielbritānija	Valerie Elizabeth Mary	Fleming	24.09.2018.	12.10.2018.
Guest speaker	Somija	Pemila Catharina	Stenback	02.10.2017.	13.10.2017.
Guest speaker	Somija	Arja Helena	Holopainen	22.11.2016.	24.11.2016.
Associated professor	Islande	Helga	Beagadottir	21.11.2016.	24.11.2016.

The heads of each faculty department at RSU monitor the quality of lecturers’ work. At the end of each astronomical year, academic staff have work performance evaluation discussions regarding the performance of the lecturer achievement of the aims set in the previous year, as well as discuss and determine the aims and tasks for the next year of studies. The opinions, insights and assessments of students regarding the study courses read are reviewed together with the lecturer. It should be noted that such reports are prepared every semester and sent to the lecturers by the head of the department before the discussion to their e-mails, so that they can prepare. Matters of

engagement and activity of lecturers at RSU are also discussed at seminars, training sessions, online or face-to-face visits organised by the faculty and the department. An evaluation report is completed and mutually agreed during the evaluation talks.

The StP director and management of departments of the Faculty of Public Health and Social Welfare meet regularly (every semester) and analyse the implementation of the programme and its challenges, with heads of departments regularly planning observations of teaching to keep up with the methodical range and encourage lecturers to perfect it.

Lecturers are happy to engage in activities and improvement courses if the subject is close and engaging to the lecturer. It is harder to attract the lecturers if the topic does not seem compelling or they do not see its relevance in the near future. Of course, continuing education points awarded for a course topic or a seminar serve as an important motivator. Several types of upskilling trainings are organised and provided: 1) thematic cycles created by the RSU Centre for Educational Growth; 2) training developed by departments attracting external industry professionals; 3) courses and seminars organised by other institutions.

Lecturers of the Department of Nursing and Obstetric Care of the Faculty of Public Health and Social Welfare improve their qualifications in trainings and courses organised by the RSU Centre for Educational Growth and outside RSU. Lecturers and teaching staff are regularly welcomed to make more active use of the opportunities offered by e-learning, as well as informed about the possibilities to attend educational seminars organised by the RSU Centre for Educational Growth to strengthen their e-learning usage skills. Information on the possibilities to master the use of various IT tools is sent to lecturers actively and on a regular basis, the training is ensured by the RSU Information Technology Department. Part of lecturers are actively involved in mastering new skills to provide the content of the course in the e-environment more successfully.

From 1 January 2017 to 1 October 2022, 69 lecturers of the Bachelor's study programme "Nursing Studies" participated in continuing education activities of the Centre for Educational Growth attending more than 180 training activities of different content. The lecturers of the study programme spent 5468 academic hours on mastering continuing education activities.

In academic year 2020/2021, the lecturers participated in the following activities of the Centre for Educational Growth:

- Creating Engaging and Interactive Online Course Design and Delivery (in English);
- *Panopto* platform;
- Creating interactive content in the e-learning environment (*H5P*);
- E-learning training: work in e-academic performance;
- Basic possibilities of *Zoom* platform;
- Advanced leading of *Zoom* interactive lectures and classes;
- Creating tests in the e-learning environment;
- Planner – a tool for organisation of tutorials;
- Remote testing possibilities;
- Registering attendance in the e-learning environment;
- Interactive presentations and real-time feedback in the *Mentimeter* tool;
- Visualization of content in presentations;
- Remote work of student groups with the *Miro* tool;
- Emotional aspects of lecturer's work: impact of the remote study process on the lecturer of students;
- Advice to the lecturer how to organise active learning in online classes;
- Studies with interactive video content;
- Assessment approaches and types of examinations in remote studies;

- Writing scientific publications: friendly guide for lecturers;
- Role of interactivity in the study process;
- Creating videos: complex in a simple and short way;
- Seminar for heads of study programmes;
- Emotional aspects of lecturer's work or how to work with students constructively in a remote format;
- Potential of immersive technologies for efficient learning strategies;
- Possibilities and functions of the new *Web of Science* platform;
- Emotional aspects of lecturer's work: constructive cooperation and defining boundaries in the study process;
- Creation of animated visual studio materials;
- *Google* tools – assistant in the implementation of the remote study process (classes).

In academic year 2021/2022, the lecturers participated in the following activities of the Centre for Educational Growth:

- Hybrid model 2021 = How to lead learning in class + remotely;
- Digital Darwinism – what it means for us each and our institution;
- Possibilities and comparison of *Web of Science* and *Scopus* databases;
- *EndNote* tool for management of references online;
- Systematic overview: looking for and organising evidence;
- Evidence-based medicine information databases;
- Skill management possibilities in study programmes;
- How to promote the acquisition of transversal skills relevant to the working environment in the study process;
- *Turnitin*: how to assess students' papers more qualitatively and effectively?;
- Assessment through technology;
- The *PubMed* database and its tools for searching for scientific publications;
- How to protect oneself from burnout (in English);
- Think tank: how to assess to learn?;
- Open access to scientific information;
- Drafting of interactive study materials (*H5P*);
- Mapping workshop for study programmes of the study direction "Health Care";
- Seminar for directors of study programmes;
- Processing of photos for visually appealing study materials;
- Think tank: feedback as a source of cognition and possibility to improve oneself;
- Systematic overview: looking for and organising evidence;
- Remote work of student groups with the *Miro* tool;
- Interactive presentations and real-time feedback in the *Mentimeter* tool;
- Evidence-based medicine information databases;
- Qualitative research methods;
- Mediation – wilful and responsible conflict resolution culture at a university.

StP lecturers constantly participate in research work, speak at scientific conferences, including international conferences, with reports. Lecturers regularly participate in *Erasmus+*, *Nordplus* mobility, teaching in foreign higher education institutions (for example, elected lecturers Eva Cela, Kristaps Circenis, Ilona Zariņa and others were on experience exchange and teaching visits in Spain, Finland, Estonia and Denmark).

Several lecturers are authors or co-authors of scientific publications, including on research methodology, scientific writing and dissemination of research results, as well as several collective monographs developed mainly in the field of psychology. Part of lecturers prepare peer-reviewed

international publications and review scientific articles. Several lecturers work on the editorial boards of scientific journals, participate in funded research projects, are experts in various projects. Lecturers are also members of professional organisations, work at and represent international organisations. Projects carried out by the academic staff contribute to the development of scientific capacity and competitiveness, which could be also characterised by the increase in the number of scientific articles in the *Web of Science* databases and *Scopus* journals, which strengthens the authority and recognisability of RSU as a centre of study and science.

For more information see CVs of lecturers, but the following articles can be noted:

- Motivators and barriers to COVID-19 vaccination of healthcare workers in Latvia (*Lielsvagere-Endele, S., Kolesnikova, J., Puzanova, E., Timofejeva, S. & Millere, I.*, 5 Oct 2022, In: *Frontiers, Health Psychology*, p. 10);
- Expectancies and reality gap about the hospital accommodation and orders among patients in Maternity Hospital (**Ansule, I., Millere, & Kīvīte-Urtāne, A.**, 24 Mar 2021, p. 213);
- The nurses' experience of infection control in their practice (**Platace, D., Sudraba, V. & Millere, I.**, 24 Mar 2021, p. 211);
- Patient's opinion as a practical construct in nursing education (**Bēta, G., Role, & Solomeņika, A.**, Nov 2021, 14th Annual International Conference of Education, Research and Innovation, p. 1066-1072);
- Patient's satisfaction as the quality indicator of nursing (**Beta, G., Role, D., Berloviene, D. & Balkena, Z.**, 20 May 2020, In: *Society. Integration. Education*. 6, p. 79-88);
- Measuring the technophobia among middle-aged and older adults in Latvia: A pilot study (**Zarina, I., Circenis, K. & Erts, R.**, 2018, In: *SHS Web of Conferences*. Pt. 2, 02003);
- Fatigue and burnout among Latvian nurses (**Circenis, K., Deklava, L., Millere, I., Pāpārde, A. & Kacare, K.**, 27 Dec 2017, In: *Global Journal of Psychology Research: New Trends and Issues*. 7, 3, p. 111-116);
- Ecological Competence of Health Care (*Renigere, R. & Cela, E.*, Dec 2019, In: *Journal of Education, Teaching and Social Studies*. 1, 2, p. 105-112);
- Level of technophobia among students (**Zariņa, I. & Krūmiņa, A. A.**, 24 Mar 2021, p. 11);
- A joint, multilateral approach to improve compliance with hand hygiene in 4 countries within the Baltic region using the World Health Organization's SAVE LIVES: Clean Your Hands model (*Lytsy, B., Melbarde-Kelmere, A., Hambraeus, A., Liubimova, A. & Aspevall, O.*, 1 Nov 2016, In: *American Journal of Infection Control*. 44, 11, p. 1208-1213);
- Evaluation of the technical efficiency of Latvia's municipal long-term care centres for the elderly (*Stals, E., Tsaurkubule, Z., Konstante, R. & Alksnis, A.*, 2020, In: *Social Sciences Bulletin*. 31, 2, p. 66-95);
- The nurses' experience of infection control in their practice (**Platace, D., Sudraba, V. & Millere, I.**, 24 Mar 2021, p. 211);
- Measuring process of care in paediatric palliative care (**Kalniņa, I. & Jansone, A.**, 2020, In: *Medicina (Kaunas)*. 56, S1, p. 230).
- The nursing profession public image on feature films in Latvia. 2021.ICN Congress Nursing Around the World Conference (**Melbārde-Kelmere, A.** (Co-author), **Kalnina, I., Gromova, A., Ansule, I., Zariņa, I. & Stūre-Stūriņa, I.**).

Research activities of academic staff are mainly related to the study programme. Research work is closely linked to the study process: first, research results complement materials of lecture courses, making students aware of current problems and the latest advances in the industry. Secondly, the problems touched upon in the projects were regularly offered to students as topics of Bachelor's theses, enabling them to participate in research. Of course, research work is also carried out with the involvement of staff in joint projects between different structural units.

During the reporting period, the lecturers of the Department of Nursing and Obstetric Care were involved in the following projects:

- Project of the Central Baltic Sea Region cross-border cooperation programme *OnBoard-Med* “Harmonization of on Board Medical Treatment, Occupational Safety and Emergency Skills in Baltic Sea Shipping” <https://onboardmed.turkuamk.fi/arkisto/en/index.html>, which was implemented in 2016-2019. The purpose of the project was to harmonise and develop courses in the management of accidents at sea in the field of treatment and occupational safety and to develop training programmes in this field. The project was implemented in cooperation with five partners: Turku University of Applied Sciences (Finland); the Estonian Nautical School, Åland University of Applied Sciences (Finland), the Latvian Maritime Academy and Rīga Stradiņš University (Latvia). Lecturers involved: **Liāna Deklava, Kristaps Circenis, Eva Cela, Velga Sudraba, Anita Znotiņa**;
- NURED: Nurse Education Development, <https://www.rsu.lv/en/project/nurse-education-development-nured>. Project implementation time: 2016-2020. The activities of the project focused on finding out the evaluation, of the nursing education programme, importance of and satisfaction with nursing education among the persons working in the sector and improving the nursing education programme by developing a more coordinated nursing training programme in Central Baltic countries. Lecturers involved: **Ivars Vanadziņš, Kristaps Circenis, Eva Cela**, Artūrs Paparde, Svetlana Lakiša;
- International project RANCARE COST Nr. CA15208, *Rationing Missed Nursing care: An international and multidimensional problem*. <https://www.cost.eu/actions/CA15208/>. Project implementation time: 2016-2020. Lecturers involved: **Inga Millere, Kristaps Circenis, Liāna Deklava**;
- European Social Fund project: Improvement of the management process and study content modernisation at Rīga Stradiņš University <https://science.rsu.lv/en/projects/improvement-of-the-management-process-and-study-content-modernisa>. Project implementation time: 2018-2023. The goal of the project is to strengthen RSU competitiveness by upgrading study programmes according to the development needs of the society and the sector, making daily studies closer to scientific activity, improving management processes, and improving competences skills of the management staff of RSU. Lecturers involved: **Lilija Antoņēviča, Anita Znotiņa**;
- Development of Biomarkers and Therapeutic Drug Monitoring as Tools for Personalizing Immunosuppressive Therapy in Renal Transplant Recipients. Project implementation time: 2019-2020. Purpose of the project: to develop a biomarkers based renal transplantation assessment tool to ensure personalise immunosuppressive therapy, which extends the half-life of renal transplants. Lecturers involved: **Anita Znotiņa**, Ieva Ziediņa, Aleksandrs Maļcevs and other;
- European Social Fund project No. 9.2.6.0/17/I/001 “Further training of the health care and health support personnel” “Activities of nurses in care for surgical patients” – 16 TIP; “Health care system and organisation and evidence-based care – care process” – 8 TIP. Project implementation time: 01.02.2021–01.01.2022 Development and implementation of a non-formal education programme, preparation of methodological aids. Lecturers involved: **Eva Cela, Kristaps Circenis, Lilija Antoņēviča, Anita Znotiņa, Ineta Raudova**.

The diverse experience of lecturers (both in professional practice, research, health care policy-making, participation in international projects) enables them to provide students with current knowledge, to share practical experience and examples, and students highly appreciate this, and to prepare the study course in such a way to synthesise theory and practice. Lecturers of the Department of Nursing and Obstetric Care are experts in different ESF projects (for example, Eva

Cela in 2021 – project expert in the grant project funded by the Ministry of Foreign Affairs in cooperation with the Moldova Emergency Medicine Institute “EU support to Eastern Partnership and Central Asian Countries 2021”. “Raising public awareness as a tool to combat disinformation. Role of medical institutions in limiting the spread of disinformation in the virtual environment and society”).

When evaluating the composition of the teaching staff of the study programme and its development strategy, it should be concluded that, as a whole, it has been possible to exploit the intellectual and professional potential of department and faculty staff, and, in particular, by raising *Erasmus* and other project funds, to find solutions for the updating and improvement of study courses with the involvement of foreign specialists, which ensures flexibility and outside perspective. A lot of work has been done to involve the Association of Diaspora Nurses and practitioners in the field into the study process, which would ensure effective exchange of information and opinions and promote networking between students, lecturers and cooperation partners.

The qualification of teaching staff involved in the implementation of the study programme corresponds to the conditions of implementation of the study programme and the requirements of regulatory enactments, as well as ensures the achievement of aims and learning outcomes of the study programme and respective study courses. The diverse experience of lecturers (both in professional practice, research and nursing policy-making, participation in international projects) enables them to provide students with current knowledge, to share practical experience and examples, and students highly appreciate this, and to prepare the study course in such a way to synthesise theory and practice.

Enclosed:

Annex 24.7. Analysis of the Composition of Teaching Staff.

[1] Law on Higher Education Institutions. 02.11.1995 Latvijas Vēstnesis, 179, 17.11.1995, <https://likumi.lv/ta/id/37967-augstskolu-likums>

### **3.4.2. Analysis and assessment of the changes to the composition of the teaching staff over the reporting period and their impact on the study quality.**

The StP is a professional study programme, so a lot of attention in its implementation is devoted to cooperation with industry professionals. Therefore, many new lecturers were involved in the programme during the reporting period, and this is partly related to the need to ensure nurse's qualification in accordance with the requirements of the Directive (Directive 2005/36/EC provides that education of a general care nurse can be obtained if at least  $\frac{1}{3}$  are theoretical studies and at least  $\frac{1}{2}$  are clinical placement), therefore the volume of placement in the programme is 60 CP.

By implementing placement every semester from the 1<sup>st</sup> to the 4<sup>th</sup> year of studies, the total period of placement in eight semesters of studies would reach 30 weeks. Therefore, the volume of placement was increased in the programme (“Placement II”, “Placement in Patient and Society Education”), as well as additional placements were introduced in the 4<sup>th</sup> year of studies (“Placement IV”, “Placement VII” and “Placement VIII”) and the requirements to the implementation of placement content have been updated (skills, competences and learning outcomes of placement have been developed). Based on the general care nurse's profession standard, several changes were made to the format of implementation of individual study courses, new study courses were created and updated (for example, “Project Development and Financial Management”, “Topicalities



in the Industry”, “Leadership and Effective Management”). Lecturers with significant experience in the field have been involved (for example, acting assistant Evija Melbārde, Jūlija Vahtina, Ieva Eigima, Ingūna Leite, Pēteris Ersts, Undīne Bušmeistere, Aiga Lasmane and other), the integration of studies and research work has been fostered. Most of the visiting lecturers are graduates of the RSU StP “Nursing Studies” – this suggests a good tendency that the experience acquired during the studies is motivation to return later as a lecturer and share knowledge by engaging in the preparation of young professionals.

The implementation of many study courses takes place through cooperation between the elected lecturers with visiting lecturers (for example, in the study course “Elderly Patient Care and Home Care”, “Oncological Diseases and Patient Care”, “Philosophy of Care and Process Model”, “Leadership and Effective Management”, etc.). This strikes a good balance between the acquisition of theoretical knowledge and its approbation, and integrates the industry developments into the study process.

When evaluating the composition of the teaching staff of StP and its development strategy, it should be acknowledged that we have generally managed to exploit the intellectual and professional potential of department and faculty staff and raise Erasmus and other project funds, thus finding solutions for the improvement of study courses. The academic and scientific potential of the teaching staff is also strengthened. Several lecturers of the study programme completed doctoral studies and/or were involved in the implementation of study courses after obtaining a doctoral degree. During the reporting period, there have been changes in the academic staff among both full-time lecturers and visiting lecturers. The changes are related to ensuring succession and interaction between generations. In recent year, *Dr. med.* Agita Melbārde-Kelmere and *Dr. med.* Rita Konstante joined the teaching staff, both were elected as assistant professors in 2020.

The knowledge of foreign language of the teaching staff involved in the implementation of the study programme meets the requirements of regulatory enactments. Thanks to the financing of European Union funds, English language proficiency improvement courses started at Rīga Stradiņš University in 2019 and still continue, where academic and administrative staff are invited to polish their knowledge to the second highest level – C1. As a university, which is the leader in Latvian education export, Rīga Stradiņš University is investing in English language skills of its team. So far, more than 114 thousand euros have been invested from own funds, while another 100 thousand euros have been invested from European Union funds.

During the reporting period, the composition of the teaching staff in the scientific and academic fields was constantly improving. The research work directions of the academic staff involved in the programme focus on the successful implementation of the study programme and in most cases are related to specialisation of lecturers within the framework of the programme – project management, leadership, interdisciplinarity. Lecturers prepare scientific articles, including in peer-reviewed journals, participate in conferences and practical seminars, trainings, traineeships and various scientific activities, develop methodological materials, participate in international and national research projects. Participation of students in scientific and practical conferences and seminars as listeners is constantly encouraged. The Department of Nursing and Obstetric Care promotes the development and improvement of academic staff, moving towards competent staff. Most lecturers have practical experience in the sector demonstrating their compliance with the professional programme.

Impact on study quality: the relationship of the composition of lecturers to the quality of studies should be analysed taking into account the quality indicators, which include the content and individual level (students, lecturers) and is based on the principle of student-centred approach.

Academic performance of students, as well as the assessment of the work of lecturers in student

surveys, provides the basis for evaluating the quality of studies: topicality and modernity of the study course; the use of theoretical knowledge in practical classes, seminars; the conformity of examinations with the content mastered in the study course; the information and study materials available in the e-learning environment and its conformity for mastering of the content of the study course; the competence of the lecturer in the subject matter of the study course; continuous participation of students in mastering of the study course; feedback from the lecturer on the content of the study course and the assessment received; lecturer's attitude to students. When evaluating lecturers' work, students in surveys appreciate and thank for the contribution of lecturers, are able to identify benefits of the study course and the future use of knowledge and skills in the profession.

In general, it can be concluded that during the reporting period the teaching staff involved in the programme are constantly focused on expanding research interests, improving their professional improvement and continuously improving and developing the quality of the courses to be taught. The qualification of academic staff involved in the implementation of the study programme corresponds to the achievement of the learning outcomes of the study programme, as well as the fulfilment of the aims and tasks of the StP. There is an improvement in the quality of publications compared to the previous reporting period – the positive trend of improvement in quantitative and qualitative indicators of scientific activity, which started at the end of the previous accreditation period, continues. Given the circumstances of the pandemic, a good level of participation in international scientific conferences has been maintained. The tendency to involve teaching staff in scientific projects according to overall capacity remains stable.

A reflection of the activities and achievements of academic staff can be found on the RSU Research Portal *PURE*.

**3.4.3. Information on the number of the scientific publications of the academic staff members, involved in the implementation of doctoral study programme, as published during the reporting period by listing the most significant publications published in Scopus or WoS CC indexed journals. As for the social sciences, humanitarian sciences, and the science of art, the scientific publications published in ERIH+ indexed journals or peer-reviewed monographs may be additionally specified. Information on the teaching staff included in the database of experts of the Latvian Council of Science in the relevant field of science (total number, name of the lecturer, field of science in which the teaching staff has the status of an expert and expiration date of the Latvian Council of Science expert) (if applicable).**

Not applicable.

**3.4.4. Information on the participation of the academic staff, involved in the implementation of the doctoral study programme, in scientific projects as project managers or prime contractors/ subproject managers/ leading researchers by specifying the name of the relevant project, as well as the source and the amount of the funding. Provide information on the reporting period (if applicable).**

Not applicable.

**3.4.5. Assessment of the cooperation between the teaching staff members by specifying the mechanisms used to promote the cooperation and ensure the interrelation between the study programme and study courses/ modules. Specify also the proportion of the number of the students and the teaching staff within the study programme (at the moment of the submission of the Self-Assessment Report).**

Cooperation between lecturers is considered successful. Lecturers from different faculties are involved in ensuring the study process, which facilitates contact between lecturers.

Cooperation between the lecturers of different study courses is promoted in StP to create optimal and logically sequential content of study courses and the planning of the course by study semesters, thereby ensuring that the knowledge from previously mastered courses serves as the basis for successful mastering of the next courses, as well as to adapt the content of the courses to be studied to the specificity of the speciality.

Information on the necessary improvements in the content and/or planning of study courses is obtained from:

1) questionnaires completed by students after each course. For example, based on the student recommendations in the study course assessment questionnaires, the content planning of several study courses was reviewed in academic year 2021/2022, allowing more time for independent and group work and the succession of study courses in the programme, clinical skills to be mastered and their link to the clinical placement were reviewed.

2) informal discussions with students on the progress of the study process, problems experienced, etc. (performed by the director of StP). For example, 1) in cooperation with the head of the study courses "Philosophy of Care and Process Model", "Family Medicine", the content of the courses was reviewed, making it more appropriate for the needs of young professionals; 2) after discussions with the heads of study courses "Organisation of Health Care" and "Leadership and Effective Management", work has been commenced on updating the content of these courses, creating a more pronounced synergy between the content of these courses;

3) discussions with lecturers of study courses regarding the planning of courses by semester, including in relation to the mastering of other courses (performed by the director of StP). For example, from academic year 2022/2023, the study course "Pedagogy in Health Care" is studied in semester 2 rather than in semester 5, thus improving the sequence of mastering study courses. The result is also improved by the fact that at RSU and department level lecturers are constantly urged to cooperate with each other. Lecturers need to be encouraged, explained the feasibility of collegial experience or exchange of teaching practices. One of such exchanges that can be emphasised is the cooperation of lecturer D. Brutāne (study course "Family Medicine") with the head of the Department of Sports and Nutrition assistant professor U. Veseta and lecturer M. Kampara on the topics to be included in the study course relating to nutrition, improvement and strengthening of health, as well as disease prevention and treatment.

A good example of cooperation, when there was an exchange of interuniversity experience of lecturers, was in April 2021, when the lecturer of the Faculty of Education, Psychology and Art of the University of Latvia dr. L. F. Dreimane shared her experience on the use of immersive technology in the study process. It should be mentioned that technological solutions do not change

the way people learn, but rather supplement and accelerate it. Virtual reality is one of the most natural methods of learning as this is learning through practice and experience. One of the initiatives discussed with lecturers from the United Kingdom – in 2023, the United Kingdom is planning to introduce the so-called virtual hospital or preparation of patients at home before they admit to the hospital for a surgery, thus reducing the time spent at the hospital. In the future, it would have to be integrated in the study process in StP “Nursing Studies”. The understanding of the need for online associations (led by patients or doctors) has grown, where users can get together, help each other with advice in treatment and rehabilitation matters. Currently, those websites are *cancer.org*, *Patients Like Me*, *Care Opinion*, etc.

4) StP quality councils, which include lecturers of the programme and representatives of students.

Based on the information obtained, the director of StP, the head of the department acts as a mediator, as necessary, in order to facilitate discussion among the heads of specific study courses for the improvement of course content.

In the planning and implementation of study courses, lecturers pay much attention to the planning of individual and group work of students in formats that would strengthen or test knowledge and skills acquired by students using clinical tasks, such as simulations, strategic games. This approach is in line with the common trend in mastering health sciences – to offer an integrated approach in the preparation of young professionals that addresses both the level of thinking, process management and operational activity. This approach is possible because many study courses are implemented in cooperation between elected lecturers and visiting lecturers – professionals in the sector. This strikes a good balance between the acquisition of theoretical knowledge and its approbation, and integrates the industry developments into the study process.

Developments in the sector are discussed at meetings of the Department of Nursing and Obstetric Care (usually before the beginning of the academic year), lecturers, practitioners and academics share mutual observations about developments in the sector and reflect on how to link study courses effectively with each other. As part of the academic year, pressing matters can be discussed at meetings of the Department of Nursing and Obstetric Care. Annual strategic seminars are organised where lecturers work in groups, looking for solutions to different situations and discussing opportunities for development and improvement of the study process. Cooperation between lecturers is strengthened at annual scientific conferences, which allow discussing different issues, finding common interests, while by organising student section work, lecturers from different faculties work in a team evaluating student research.

At the end of academic year 2020/2021, due to updating of the professional standard for a nurse (general care nurse) (2020), a working group of RSU, working groups of lecturers and a summer school for lecturers were set up to discuss the interlinking of study courses, to prevent overlapping of topics, to adapt the content of the study course according to the developments in the professional standard. Lecturers assessed such appointments positively, stressing that they enabled them to see the placement of a study course taught in the whole study programme, to understand the succession of topics, review different study courses, delve into specific topics.

The shift in educational paradigm is about putting skills at the forefront, so StP “Nursing Studies” sets the goal of developing a skills management system that would ensure a transparent and consistent mastering of skills in the nurse’s profession, with evidence-based certification of the skills acquired by future professionals. Since 2019, the StP director and lecturers of the study course “Clinical Care and Rehabilitation in Patient Care” have been involved in the ESF project “Improvement of the management process and study content modernisation at Rīga Stradiņš University” (No. 8.2.3.0/18/A/011) of specific objective 8.2.3 “To ensure better governance at higher education institutions” Line I “Improvement and alignment existing StP content with industry

development needs” Action 6 “Skills monitoring system”. The purpose of the project is to develop a clinical skills monitoring system based on a common methodology that promotes standardisation of skills acquisition and assessment, and a mechanism that identifies skills acquired in the study programme, defines the level of skills acquisition achieved and creates a portfolio of personalised skills. This made it possible to reach the aim of StP “Nursing Studies” – to develop clinical skills descriptions, procedural descriptions, assessment criteria, video and audio materials, to define the necessary equipment for the acquisition of skills.

Today, a huge supply of different technological solutions and freely available resources, as well as the way of thinking of the new generation and the COVID-19 pandemic, have changed the learning and study process in higher education in healthcare. Students are now studying more independently, choosing methods and resources themselves, in other words, they are taking a self-directed learning approach. As a result, the role of a lecturer has also changed, moving from leading to supporting, providing guidance on individual learning pathways. It is necessary to ensure that students know what skills and competences they need to learn to be competitive in the labour market. There needs to be a system that shows a roadmap for achieving personal goals – what skills need to be learned, how and at what level, so that they can become professionals in the chosen profession at the end of the education process. Meanwhile, lecturers need to know how to focus a student on a self-directed learning approach, how to make the best use of it, and how to assess students’ acquired skills and knowledge equally.

Meetings on the improvement of regulations on the development of scientific paper were also organised for lecturers. This was needed both to educate lecturers on the requirements for the development of scientific research papers, because many of the lecturers are scientific supervisors, and to share research experience and opinions about the development of scientific research works, by synchronizing the department level requirements with the requirements of RSU and the Faculty of Public Health and Social Welfare.

Lecturers of individual study courses actively develop cooperation with the professional environment going on study visits, inviting representatives of different institutions to share experience in the study course, while students can participate in the work of the institutions as volunteers. Department lecturers are actively involved in the mastering of *H5P* tool as part of the digitisation of study materials in order to enrich the range of methods used in the implementation of study courses.

In line with the university’s strategy and internal procedure, regular observation work is also performed. The cooperation of teaching staff takes place, for example, in the form of attendance of each other’s lectures and classes making it possible to assess the strengths and weaknesses of the work. Mutual feedback seminars on current topics are organised for cooperation of lecturers. Several members of teaching staff cooperate by jointly creating study courses, supervising papers of students, as well as performing scientific activity.

The RSU development strategy provides that RSU implements high quality internationally recognised study programmes that are demanded in the labour market. Since 2019, RSU has a School of Junior Academics. It should be noted that some of the new colleagues involved in StP “Nursing Studies” have used it. This enables young and also experienced lecturers to learn in depth the pedagogical skills so badly needed in their daily work with students. Separately, the Department of Nursing and Obstetric Care has introduced the support for young lecturers (mentoring process), a voluntary function to promote the integration of young colleagues, support them in teaching challenges and help find solutions.

The lecturers have also acted as organisers of various scientific conferences, session leaders, evaluators of the summaries and publications submitted:

- RSU Research Week 2021 – international multidisciplinary event with participation of existing and future researchers (assist. prof. Kristaps Circenis, prof. Inga Millere, assist. prof. Oga Fokina, assist. prof. Agita Melbārde-Kelmere);
- International Scientific Conference “Society. Integration. Education” 2020 (participated prof. Inga Millere);
- in 2020, assist. prof. Kristaps Circenis and lect. Eva Cela participated in a panel discussion “Reform of Nurse’s Profession” within the international year of nurses and midwives;
- in 2019, assist. prof. Gunta Bēta reviewed several publications and other editorial activities for the journal “Global Journal of Health Science”;
- prof. Kristaps Circenis reviewed publications and performed other editorial activities within the RSU International Conference in 2019, as well as at the international scientific conference “Society. Integration. Education” in 2019 and 2020;
- prof. Rita Konstante and assist. prof. Agita Melbārde-Kelmere were scientific editors of the book “Care Diagnoses. Definitions and Classification 2018-2020” published by the Latvian Nurses Association in 2020;
- in 2019, lect. Eva Cela participated in the organisation of the International Conference on Clinical Nursing and Practice in Switzerland.

Since 2021, work has been carried out on the preparation of two projects, one of which received ESF Erasmus funding in 2022, and the project *Ethco – For Better Ethical Safety in Future Health Care Environments* started with participation of assist. prof. Agita Melbārde-Kelmere, assist. prof. Kristaps Circenis, Ilona Zariņa, Evija Melbārde and Evita Helandere.

Participation in the networking project *Cultural Competence’s assessment at the Nursing Degree within the European Higher Education Area (CCA-Eunurse)* continued, as well as in 2018, the Department of Nursing and Obstetric Care of the Faculty of Public Health and Social Welfare became a fully-fledged member of the Florence Network. Participation in these networking will promote international projects in nursing education and research. Participation in this networking will promote international cooperation in the field of research and academic work, as well as enables to follow current trends in nursing and midwifery education in person.

The study process is clearly, understandably and logically structured. The established and successfully functioning quality management system ensures continuous transparency of the study process and allows solid advance towards the goal and to reach it successfully. The attitude of the teaching staff towards the duties to be performed clearly confirms the possibilities of sustainable development of the study programme.

The cooperation of the teaching staff is a team work in which everyone sees their place and task. The qualification and motivation of the teaching staff to work in the provision of the study process and research is high. Relationships with students are humane, forthcoming, while maintaining strict requirements for each study task.

It is possible for students to receive help, consultations and support from lecturers during the study process, as well as in case of uncertainties it is possible for students to contact the director of the study programme to receive consultations on the most successful implementation of the study process both individually and for students in general.

There is a relatively small hierarchy of academic management for the implementation of the study programme. Students are regularly invited to comment on the quality of studies, as a result of which shortcomings and possible results are revealed in order to promote students’ motivation in further study process.

In the programme, work is constantly ongoing to improve quality management to meet the

requirements if competence-based higher education and foster student-centred, interactive, self-directed, practice and real-life related problem-based and reflexive studies. This is a complicated, creative and innovative process, which provides prospects for the future and prepares lecturers and students for changes and challenges.

The ratio of the number of students and teaching staff in the study programme: 407 students and 122 lecturers. The ratio of the number of students and teaching staff is 3.3.

Head of the study programme: lecturer Eva Cela

7 February 2023

APPROVED

Rīga Stradiņš University

Faculty of Public Health and Social Welfare Council

15 February 2023

Minutes No. 5-SVSLF-1/2/2023

APPROVED

At Rīga Stradiņš University Dean's Council

6 March 2023

Minutes No. 4-SD.1-2/9/2023

# Annexes

III - Description of the Study Programme - 3.1. Indicators Describing the Study Programme		
Sample of the diploma and its supplement to be issued for completing the study programme	24.1.0_pielik_Diplom_Bak_Nursing_ENG.pdf	24.1_pielik_Dipl_pielik_paraugs_PB_Maszinibas.pdf
For academic study programmes - Opinion of the Council of Higher Education in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions (if applicable)		
Compliance of the joint study programme with the provisions of the Law on Higher Education Institutions (table) (if applicable)		
Statistics on the students in the reporting period	16_Anx_Stud_statistics_Bak_Nurse.pdf	16_pielik_Maszinibas_statistika_lv.pdf
III - Description of the Study Programme - 3.2. The Content of Studies and Implementation Thereof		
Compliance with the study programme with the State Education Standard	17.1_Anx_National_educ_standard_Bak_Nurse.pdf	17.1_pielik_PBSP_Maszinibas_atbilst_izglitibas_stand_lv.pdf
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard or the requirements for professional qualification (if applicable)	18.2_pielik_Prof_standarta_kartejums_Maszinibas.pdf	18.2_pielik_Prof_standarta_kartejums_Maszinibas.pdf
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)	17.2_Anx_Industry_Specific_Regulatory_Bak_Nurse.pdf	17.2_pielik_Atbalst_nozares_regulejumam_PB_Maszinibas.pdf
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	18.1_Anx_Mapping_st_courses_achiev_learn_outcomes_Bak_Nurse.pdf	18.1_pielik_StKursu_StP_rezultatu_kartejums_PB_Maszinibas_lv.pdf
The curriculum of the study programme (for each type and form of the implementation of the study programme)	Anx_19_StP_plan_PBSP_Nursing.pdf	19_pielik_StP_planojums_PBSP_Maszinibas.pdf
Descriptions of the study courses/ modules	20_Anx_Study_course_description_PBSP_Nursing.pdf	20_pielik_Kursu_apr_Maszinibas_bak.pdf
Description of the organisation of the internship of the students (if applicable)	09_Anx_Placement_org_Nurse.pdf	09_pielik_Prakse_Maszinibas.pdf
III - Description of the Study Programme - 3.4. Teaching Staff		
Confirmation that the academic staff of the doctoral study programme includes not less than five doctors, of which at least three are experts approved by the Latvian Council of Science in the branch or sub-branch of science in which the study programme intends to award a scientific degree (if applicable)		
Confirmation that the academic staff of the academic study programme complies with the requirements specified in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions (if applicable)		



# Nutrition (42722)

Study field	<i>Health Care</i>
ProcedureStudyProgram.Name	<i>Nutrition</i>
Education classification code	<i>42722</i>
Type of the study programme	<i>Professional bachelor study programme</i>
Name of the study programme director	<i>Lolita Vija</i>
Surname of the study programme director	<i>Neimane</i>
E-mail of the study programme director	<i>Lolita.Neimane@rsu.lv</i>
Title of the study programme director	<i>Ārsta grāds</i>
Phone of the study programme director	
Goal of the study programme	<i>Provide the opportunity to obtain a Bachelor's degree in health care and to receive professional education in nutrition, in accordance with the standard for professional higher education and the standard for the profession of nutritionist, forming the basis for future professional activity in the field of health and social care and subsequent certification.</i>
Tasks of the study programme	<p><i>1. Provide students with the opportunity to acquire professional knowledge, skills and competence in nutrition therapy, preparing specialists who are able to adequately understand and effectively solve professional tasks, successfully cooperate with other specialists and to be part of a multiprofessional / interdisciplinary team work;</i></p> <p><i>2. Train students in research work, developing their ability to draw up and implement research projects in nutritional therapy and to present them;</i></p> <p><i>Promote high ethical standards in professional work and motivation for professional growth and self-development by showing determination, initiative and responsibility for maintaining and increasing their own qualifications;</i></p> <p><i>4. Develop an understanding of the place, role and responsibilities of the nutritionist in promoting our public health and national well-being;</i></p> <p><i>5. Create the conditions for the acquisition of special knowledge, skills and competences for the work of a nutritionist in the health care and rehabilitation system, based on multi-stage practical work and placement system;</i></p> <p><i>6. Provide theoretical and practical knowledge both in basic medical disciplines, clinical subjects and nutritional science, as well as in basic food production technology and public catering;</i></p> <p><i>7. Acquire the skills for lifelong independent learning and contribute to the competitiveness of professionals in the local and EU labour market. The aims and objectives of the programme are relevant to the interests and needs of the students.</i></p>

Results of the study programme	<p><i>Knowledge:</i></p> <ol style="list-style-type: none"> <li><i>1. Use the acquired knowledge of food and nutrient components, their chemical structure, transformations during processing and storage, and methods for quantification in order to advise both large groups and individuals on nutritional issues.</i></li> <li><i>2. Work creatively in the food-related areas, communicating successfully with both colleagues, cooperation partners and media. Be ethical in professional decision-making and problem-solving. Practice ethical responsibility by understanding the potential impact of their own actions on individuals, groups and society. Communicate effectively through a variety of media to inform the general public about healthy eating habits.</i></li> <li><i>3. Demonstrate knowledge of the key concepts, principles, patterns and advances in nutritional science, approaching it with critical mindset.</i></li> </ol> <p><i>Skills:</i></p> <ol style="list-style-type: none"> <li><i>4. Assess the functional status of the patient/client by choosing appropriate assessment methods, collecting and analysing information and prescribing optimal nutritional therapy.</i></li> <li><i>5. Obtain, select and analyse information independently and use it in nutrition and food-related research, planning and analysis, using this acquired knowledge to organise catering in rehabilitation centres, kindergartens, schools, hospitals.</i></li> <li><i>6. Independently direct the development of own competences and further learning.</i></li> </ol> <p><i>Competencies:</i></p> <ol style="list-style-type: none"> <li><i>7. Analytically describe and discuss in a reasoned way the molecular basis of metabolism and its regulation, human physiology and application of modern genetic achievements and biochemistry in nutritional science.</i></li> <li><i>8. Obtain, select and analyse information independently and use it, find effective solutions for patient treatment, applying knowledge of the basic principles of science-based medical nutrition, methods and tools used in acute and chronic diseases. Able to demonstrate a scientific approach to solving problems in nutritional therapy and, using the theoretical foundations and skills acquired, to carry out professional, artistic, innovative or research activity.</i></li> <li><i>9. Develop and implement a nutritional therapy plan in accordance with the requirements of professional ethics, working independently or in a multiprofessional team and taking responsibility for individual and team work or work of other people, direct the development of own competences and further learning independently.</i></li> </ol>
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Final examination upon the completion of the study programme	Development and Defence of Bachelor's Thesis National Examination
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## Study programme forms

### Full time studies - 4 years - latvian

Study type and form	Full time studies
Duration in full years	4
Duration in month	0
Language	latvian
Amount (CP)	160
Admission requirements (in English)	Secondary education
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	Professional Bachelor's Degree in Health Care
Qualification to be obtained (in english)	Nutritionist

### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

### Part time studies - 4 years, 6 months - latvian

Study type and form	Part time studies
Duration in full years	4
Duration in month	6
Language	latvian
Amount (CP)	160
Admission requirements (in English)	Secondary education
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	Professional Bachelor's Degree in Health Care
Qualification to be obtained (in english)	Nutritionist

### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

### 3.1. Indicators Describing the Study Programme

**3.1.1. Description and analysis of changes in the parameters of the study programme made since the issuance of the previous accreditation form of the study field or issuance of the study programme license, if the study programme is not included on the accreditation form of the study field, including changes planned within the evaluation procedure of the study field evaluation procedure.**

Table 1. Changes in the StP Parameters

No.	Parameter	Description and analysis of changes in the StP parameters during the accreditation period	Planned changes within the assessment procedure
1.	Study direction	-	-
2.	Title of the StP	-	-
3.	Code according to the Latvian Education Classification	-	-
4.	Head of the StP	-	-
5.	Academic degree of the head of the StP	-	-
6.	Objective of the StP	-	-
7.	Tasks of the StP	-	-
8.	Learning outcomes to be achieved	Editorial clarifications have been made, reducing the total number of study results so as not to exceed the recommended amount of 9 results.	-

<b>No.</b>	<b>Parameter</b>	<b>Description and analysis of changes in the StP parameters during the accreditation period</b>	<b>Planned changes within the assessment procedure</b>
9.	Final examination upon the completion of the StP	-	-
10.	Type and form of studies	-	-
11.	Duration of implementation	-	-
12.	Language of implementation	-	-
13.	Volume of the StP (CP)	-	-
14.	Admission requirements	StP admission requirements have changed during the reporting period. Compared to the previous requirements, a CE result in Biology or Chemistry is not required, replacing it with a year grade in Biology or Science.	-
15.	Degree to be awarded	-	-
16.	Qualification to be awarded	-	-
17.	Place of implementation	-	-

Table 1 clearly shows that no significant changes have been made to the parameters of the study programme since the issuance of the previous accreditation sheet of the study direction. When organising working groups with the Study Programme Quality Council and the heads of study courses, the learning outcomes in the study programme and study course descriptions have been updated, harmonising them with the amount of CP/ECTS, cross-compliance analysis (mapping, see Annex 18.1) of the learning outcomes of the study programme and study courses included therein has been performed, as well as the content of the courses has been supplemented with the latest developments of the field.

**3.1.2. Analysis and assessment of the study programme compliance with the study field. Analysis of the interrelation between the code of the study programme, the degree, professional qualification/professional qualification requirements or the degree and professional qualification to be acquired, the aims, objectives, learning outcomes, and the admission requirements. Description of the duration and scope of the implementation of the study programme (including different options of the study programme implementation) and evaluation of its usefulness.**

Professional Bachelor's study programme "Nutrition" has been implemented at Rīga Stradiņš University since the academic year 2003/2004, the part-time programme – since the academic year 2005/2006. The volume is 160 credit points (240 ECTS). It is a full-time and part-time regular study programme, which is implemented over four and four-and-a-half years, or eight and nine semesters. Professional Bachelor's study programme "Nutrition" was accredited several times during its lifetime for the full accreditation period – six years –, with the last accreditation for the programme as part of the health care study direction in 2017.

This is the only study programme in Latvia that offers in-depth and professional knowledge in nutrition science. The study programme is based on and updated in accordance with the European Federation of the Associations of Dietitians (EFAD) Academic Standards – 2018 revision; available only [in English](#)).

The **objective** of the study programme is to provide the opportunity to obtain a Bachelor's degree in health care and acquire professional education in nutrition specialty in accordance with the standard for professional higher education and the professional standard of nutritionist, forming the basis for further professional activity in the field of health and social care and subsequent certification.

The **main tasks** of the study programme are to provide professional studies in nutrition science that are applicable in practice and comply with [the professional standard of nutritionist](#) (only in Latvian, 03.06.2003.) and the regulations of the Cabinet of Ministers (CM) of the Republic of Latvia through in-depth learning; to prepare students for creative, research and pedagogical work in the field; to facilitate the competitiveness of the programme graduates in the current socio-economic conditions of the local and international labour market.

The clarity of the objective and tasks allows them to be implemented and achieved. The relevance of the objective and tasks and the outcomes achieved are evidenced by the high competition for study places in the study programme, the willingness of alumni to continue their studies at Master's level, the demand for study programme alumni in the labour market and the positive feedback from employers.

The **learning outcomes** achieved by students in the study programme enable them to engage in professional activities in accordance with the tasks set out in the professional standard. Alumni have acquired the knowledge and skills appropriate for the qualification of nutritionist, based on the latest scientific achievements, which allow to implement the full range of measures required in nutrition science to provide an adequate service of high-quality.

The study programme of 160 CP / 240 ECTS is delivered as full-time (four years) and part-time (four years and six months) regular studies. There is a strong demand for both of these forms, as shown by the high number of applications during the admission period. For many years, professional Bachelor's study programme Nutrition has had the highest number of applications per state-funded study place at RSU. Enrolment in the study programme is organised in accordance with the admission rules approved by the RSU Senate. The admission requirements include the possibility to start studies in the study programme with acquired secondary education and compulsory centralised examination (CE) results in Latvian, English and mathematics. Part-time regular studies have a high proportion of students who combine work and studies and start studying some time after completing secondary education, or choose to study with a higher education degree in another field.

The professional bachelor's study program in Health care with the qualification of Nutrition specialist was established in accordance with the regulations of the Cabinet of Ministers of the Republic of Latvia No. 305 "Regulations on the standard of state professional higher education", and its name clearly indicates the content of the program and the qualifications to be obtained. The code of the study program indicates the compliance of the study program with the direction of health care, in which professionals are prepared in one of the functional specialist professions important for rehabilitation. The mission of the professional bachelor's degree "Nutrition" is to promote the development and sustainability of the nutrition industry in Latvia, nutrition policy and nutrition science are inextricably linked with health care and the study direction of health care. The name of StP "Nutrition" derives from the understanding of nutrition as both a health-promoting, health-maintaining and academic discipline, which is established in the professional standard. According to the data of the World Health Organization, 7 of the 10 main causes of death in the world in 2019 were chronic non-infectious diseases, while a healthy diet is very important in the prevention of these diseases, for example, cardiovascular and oncological diseases, type 2 diabetes, etc.

Historically, StP "Nutrition" was developed and then implemented based on the requirements of the Nutrition Specialist Profession Standard (2003), the regulatory framework in higher education. International experience in the work practice and education of a nutritionist has also been taken into account in the implementation of StP. A new professional standard for professional bachelor's level education entered into force on August 9, 2023, the new professional link can be seen here (only in Latvian) <https://registri.visc.gov.lv/profizglitiba/dokumenti/standarti/2017/PS-268.pdf>.

The mapping of the study program was still carried out based on the previous professional standard, but also when reviewing the content of the StP according to the new professional standard, it was concluded that the study courses implemented so far basically provided knowledge, skills and competences that correspond to the qualification of a nutritionist. Taking into account the new standard of the profession, the StP study courses will be carefully reviewed again, so that they fully ensure the basic tasks and responsibilities of the professional activity corresponding to the profession, the professional qualification requirements, the general and professional knowledge, skills, attitudes and competences necessary for their fulfillment. The structure and content of the study program enable the implementation of the goals and tasks of the study program, as well as achieving the study results provided for in the study program and preparing graduates for their professional tasks.

Study program code, according to MK regulations no. 322.

<https://likumi.lv/ta/id/291524-noteikumi-par-latvijas-izglitibas-klasifikaciju>, (only in Latvian) is 42722 it describes the study program of the second-level professional higher education (fifth-level professional qualification and professional bachelor's degree), its studies duration for full-time studies is four years, for part-time studies four years and six months. The second part of the code "722" - educational program group: Medical services / Healthcare services and educational program group: nutrition science. Compliance is demonstrable and understandable.

The study program code is interconnected and corresponds to the parameters of the study program - StP goals, tasks, achievable results and obtainable qualifications.

### **3.1.3. Economic and/ or social substantiation of the study programme, analysis of graduates' employment.**

In order to improve the process of obtaining feedback from alumni who have already graduated from RSU for some time, in 2017 the RSU Alumni Association in cooperation with the RSU Academic Affairs Department and the Centre for Educational Growth (CEG) developed a common alumni survey questionnaire and an additional invitation was sent to alumni of professional Bachelor's study programme "Nutrition" to fill in the questionnaire. In previous years, five questionnaires were completed, and in 2022, following an additional invitation, a further 15 questionnaires will be completed (responses from alumni who completed their studies in 2011 or later were taken into account).

A total of 20 alumni of professional Bachelor's degree programme "Nutrition" have completed the questionnaire. Of these, 15 graduated from the study programme in the last six years, 13 are working in a field fully related to the study programme.

Analysing the questionnaires of the alumni of study programme "Nutrition", it can be concluded that the questionnaires were mainly filled in by alumni born after 1990. Alumni rated the quality of studies as good (55%), some rated it as very good and some as average. The acquired theoretical knowledge, which is currently used by the alumni in practice, was similarly evaluated. Practical skills are mainly evaluated by respondents as good or very good, because each year, as a result of the development of the study programme, significant attention is paid to improving cooperation with employers and the implementation of placement. 65% of respondents are currently working in a field related to the study programme, 25% are working in a semi-related field and only two alumni surveyed are not working in a field related to the study programme. The acquired knowledge is useful for the respondents in their profession and position, which helps to develop professional skills. 55% of respondents indicated that their education in study programme "Nutrition" has helped them to find a job, 25% indicated it has rather helped them, and 70% would recommend this study programme to friends, relatives or acquaintances. In general, the choice of the study programme, its implementation, and the achieved learning outcomes are evaluated positively. Student proposals for the improvement of the study programme are considered in cooperation with the lecturers involved in the implementation of study courses, proposals for improvement measures are considered at the meetings of the Department of Sports and Nutrition and at the meetings of the StP Quality Council. The results of student surveys are taken into account in the development of the study programme.

For example, the implementation of study course Clinical Placement has been revised and this study course, the volume of which was 20 CP / 30 ECTS, has been increased to 23 CP / 34.5 ECTS,



with a separate course Clinical Placement I, which is implemented already in the spring semester of the first year, in order to introduce future nutritionists, who take theoretical study courses during the first two years of studies, to the specifics of the work of a medical institution and health care services. During this placement, students are introduced to the role of a multiprofessional team and the role of the nutritionist within it, to the duties and responsibilities of a nutritionist, and to the equipment in the office.

Following the recommendations of alumni and students, the volume of Nutrition Education course was increased from 8 CP / 12 ECTS to 10 CP / 15 ECTS by dividing the course into two parts: Basics of Nutrition Education – 5 CP / 7.5 ECTS; and Nutrition Therapy – 5 CP / 7.5 ECTS.

Following the recommendations of employers and professional association, the Latvian Association of Diet and Nutrition Specialists (LDUSA), new topics have been added to the study courses and increased attention has been paid to certain issues. For example, the topic of taking a dietary history has been expanded, and the protocols for nutritionist consultations approved by LDUSA on 5 August 2020 have been introduced and used for training and national examinations: for children, children with eating disorders, pregnant women, adults, first and repeated, outpatient and inpatient.

StP "Nutrition" was created in response to the needs of the nutrition industry and strategic tasks in the country.

Nutritional therapy is a separate branch of health care, which includes both medical technologies of personal evaluation and analysis (hereinafter - MT) and various treatments in MT. Nutritional therapies in MT are widely used and are effective in maintaining and preventing the health of various individuals, as well as in the process of treatment and rehabilitation. They are safe, non-invasive, respecting ethical principles. On the other hand, the nutrition specialist's consultation is a long-term, non-invasive process that includes a conclusion, therapy goals and recommendations according to the person's health condition. A nutritionist's consultation is recommended for everyone to gain an understanding of nutrition, its relationship with well-being and health. The consequences of insufficient and unbalanced nutrition are not only changes in body weight, but also various diseases or the risks of their development. The goal of the profession of a nutritionist is to help individuals adjust their daily diet, adapting it to each individual's state of health, metabolism and physical activity.

However, it must be said that the profession of a nutritionist has a relatively recent history (2003) and step by step the mission and tasks of the profession are being convinced not only of society as a whole, but also of potential employers both in medical and rehabilitation institutions, as well as in nutrition policy institutions, municipalities and the education sector.

A review report published on February 16, 2022 in PubMed „ [Global architecture for the nutrition training of health professionals: a scoping review and blueprint for next steps](#) " reports that the number of trained nutrition professionals , which is adequate and can cover at least the minimum requirements for providing nutrition policy, is generally a capacity indicator related to the number of trained nutritionists per 100,000 population, which varies greatly from country to country, which may reflect the country's capacity to develop and implement nutrition policies and interventions. Among the 126 countries that reported the number of nutritionists, only 23 (18.3%) had the recommended density of 10 nutritionists per 100,000 population or more. Converting to the population of Latvia, we would need at least 184 certified nutritionists working in their field.

It should be also noted that the availability of nutritionists in Latvia still varies widely by region. During the placement, employers have the opportunity to recruit potential employees, which they actively do. The offer of rehabilitation services is steadily growing, creating new jobs. Informal

conversations with employers involved in the implementation of placement, participating in the StP Quality Council, the Council of the Faculty of Rehabilitation (RF), inform about the plans to increase the number of nutritionists in their medical institutions in the near future – both in the public and private sector.

On 21 December 2022, the State Agency of Medicines approved medical technology for nutritionists – Nutritionist Consultation – by Decision No 1-50/433, which will allow a much broader involvement of nutritionists in the treatment process. More information is available on the website of the State Agency of Medicines (information in [Latvian](#) only).

The need for nutritionists in the labour market is also reflected in the number of job offers for graduates of the study programme, which most often appear on the Latvian Nutritionists website (available only in [Latvian](#)) or in LDUSA's correspondence with members of the association.

#### **3.1.4. Statistical data on the students of the respective study programme, the dynamics of the number of the students, and the factors affecting the changes to the number of the students. The analysis shall be broken down into different study forms, types, and languages.**

Full-time study programme "Nutrition" has 12 state-funded study places and 24 additional places for tuition fee are planned. Part-time studies are carried out entirely at the students' personal expense. The number of students applying to study is consistently high, both in full-time and part-time forms. In the last three years, 2020, 2021 and 2022, the admissions received 433, 410 and 383 applications respectively for full-time studies and 94, 96 and 90 for part-time studies. For many years, professional Bachelor's study programme "Nutrition" has had the highest number of applications per state-funded study place at RSU, which allows the study programme to admit highly motivated students who have achieved high results in centralised examinations during their secondary education.

The planned outcomes of the study programme and the study courses implemented within it have been defined in the form of knowledge, skills and competences, based on Latvian learning outcomes level descriptions (level 6) which comply with the European learning outcomes level descriptions.

The number of students during the accreditation period (from academic year 2016/2017 to 2021/2022) ranged from 66 to 98 in the full-time study programme and from 41 to 118 in the part-time study programme. Although the StP "Nutrition" is the latest professional study programme of the Faculty of Rehabilitation, the number of students is driven by the demand for nutritionists in the labour market. It is particularly important to increase the number of nutritionists in the regions of Latvia. This could be possible by continuing the already successful interdisciplinary cooperation with the professional organisations of the Latvian Medical Association, by jointly organising seminars and conferences, as well as actively working to promote the recognition of the nutritionist profession. The number of students is much higher in the first year than in subsequent years. The drop in the number of students in the second year of studies is due to student drop-outs in the first year of studies. In the third and fourth year of studies, there is little change in the number of students. The main reasons for discontinuing studies are academic failure and dropping out of one's own free will. Every student who has decided to leave studies is interviewed, and students tell that it is often difficult to combine studies with work and family life. The study programme has a high proportion of working students and students who choose to study longer after secondary education

and have already started a family. Many also indicate that studying in this programme is more difficult than other study experiences.

Tracking the dynamics of student numbers shows that they have not been negatively affected by the reduction in state-funded study places and the situation related to the Covid-19 pandemic.

Within the study programme, students have the opportunity to participate in the Erasmus+ student mobility programme, undergoing clinical placements at partner universities outside Latvia, as well as the opportunity to cooperate with partner universities with which Erasmus+ agreements have been concluded. Graduates of the study programme will continue to complement the Latvian labour market and be competitive in the European labour market. Every year, students take part in the Riga Food and School trade fairs, which provide excellent opportunities to present the study programme offer. RSU regularly hosts an Open Day, in which students and teaching staff of study programme "Nutrition" are actively involved. Teaching staff of the study programme working in clinics participate in the Shadow Days. Teaching staff and students of the study programme are also actively involved in the activities of the Academy of Junior Doctors. In the academic year 2021/2022, a student research interest group in Nutrition Studies was established, which has quickly gained recognition and popularity also outside the activities of the group, such as successfully conducted seminars in collaboration with other students' interest groups and participation in the RSU Health Day.

### **3.1.5. Substantiation of the development of the joint study programme and description and evaluation of the choice of partner universities, including information on the development and implementation of the joint study programme (if applicable).**

## **3.2. The Content of Studies and Implementation Thereof**

### **3.2.1. Analysis of the content of the study programme. Assessment of the interrelation between the information included in the study courses/ modules, the intended learning outcomes, the set aims and other indicators with the aims of the study course/ module and the aims and intended outcomes of the study programme. Assessment of the relevance of the content of the study courses/ modules and compliance with the needs of the relevant industry, labour market and with the trends in science on how and whether the content of the study courses/ modules is updated in line with the development trends of the relevant industry, labour market, and science.**

Professional Bachelor's study programme "Nutrition", leading to a degree in health care and qualification of a nutritionist, consists of four years of full-time studies or four years and six months of part-time studies. Each year of study consists of two semesters, each ending with an examination period during which the knowledge, skills and competences acquired by students are tested. According to CRegulations of the Cabinet of Ministers of the Republic of Latvia No. 305 "Rules on the standard of state professional higher education, students must acquire 160 CP / 240

ECTS during the study programme.

Clinical placement is a compulsory part of the study programme, which is organised in accordance with the legislation of the Republic of Latvia and is intended for improvement of skills necessary for obtaining professional qualification in a company or organisation relevant to the field outside RSU. Currently, the volume of clinical placement is 23 CP / 34.5 ECTS (20 CP / 30 ECTS in the previous accreditation period), and it is planned to increase the volume of clinical placement to 26 CP / 39 ECTS as the number of health care institutions and placement supervisors willing to host future nutritionists increases. Clinical placement is carried out in three phases. The placement is implemented in the 1st, 2nd and 4th year of full-time studies and in the 1st, 2nd, 4th and 5th year of part-time studies. 12 CP / 18 ECTS are dedicated to the national examination, including the elaboration and defence of the Bachelor's thesis (in the 4th year of full-time studies or in the 5th year of part-time studies), while the remaining 122 CP / 183 ECTS are made up of general, theoretical, information technology, professional specialisation and free elective study courses.

General education study courses comprise a total of 20 CP / 30 ECTS. This includes theoretical courses in humanities and social sciences, including study courses that develop basic social, communicative and organisational skills.

Theoretical core courses of the field and information technology courses amount to 36 CP / 54 ECTS. These include general core courses in natural sciences such as Biology, Anatomy, Physiology, etc., which level students' knowledge and provide them with the comprehensive knowledge, skills and competences needed for professional specialisation courses.

Field-specific professional specialisation courses constitute 60 CP / 90 ECTS. They provide students with in-depth studies for mastering the profession of nutritionist, and give them the specific knowledge, skills and competences in the profession according to the professional standard. These are the pre-clinical courses in the first two years of studies and the clinical study courses, which are mainly delivered in the third and fourth years of studies (also in the fifth year of part-time studies).

Elective courses of the Bachelor's study programme amount to 6 CP / 9 ECTS.

The study courses of the professional Bachelor's study programme are designed and continuously developed in accordance with the professional standard of nutritionist in Latvia. In 2022, a working group of the Latvian Association of Diet and Nutrition Specialists developed a new professional standard, which is currently in the process of being agreed with the Union of Professional Organisations of Medical Practitioners of Latvia (LĀPPOS) and the Ministry of Health.

Learning outcomes are clearly formulated both for the study programme in general and for each study course. Potential students are offered study course descriptions that define the objective of the course, the required prior knowledge, the content, as well as the examination methods and the results of the study process – what knowledge, skills and competences students acquire as a result of completing the study course. This information is freely available on the RSU website. Additional information for students (about the content and expected outcomes of the study course, information about the topics of lectures, practical classes and seminars, list of required and recommended readings and requirements for completing the study course) is provided in the study course description, which is available in e-studies.

During the last accreditation period, there was a transition to conducting the theoretical part of the state examination electronically on the e-studies platform, using the Respondus (or alternative, equivalent solutions) programme to ensure academic integrity. The practical part of the national examination was also conducted in the e-environment for two years, due to the Covid-19 epidemic, using clinical cases developed by teaching staff of the professional study courses who are certified nutritionists. The academic year 2021/2022 saw the return to the practical part of the national

examination in a real clinical setting. For the assessment of the practical part of the national examination, assessment criteria have been established to ensure that all members of the assessment board have a common view of the assessment. The questions and clinical cases used in the theoretical part of the national examination were regularly reviewed, the most error-prone questions were analysed and at least 20% of the questions and situational tasks were replaced each year.

The content of the study programme is regularly improved, and each year the study course descriptions and content of lectures and classes are revised to incorporate the latest scientific findings and to supplement the range of the latest literature sources recommended to students.

The topics of Bachelor's theses are chosen by students according to their chosen field of professional activity, the topics are relevant, the results are practically applicable and contribute to the field of rehabilitation. These include translation of tools used in rehabilitation, including nutrition, literature reviews on therapeutic methods used in nutrition therapy and their effectiveness, etc. The selection and development of the topics are based on the most recent scientific literature and take into account the latest trends in the field.

The reflected analysis of the content of the study program, as well as the information provided above, clearly shows the information included in the study courses, the results to be achieved, the goals set, etc. interlinking of indicators with study program goals and achievable results. The content of the study courses is current and relevant to the needs of the nutrition industry and the labour market. Evaluating the compliance of the program with scientific trends, it can be concluded that the content of the study courses is regularly updated according to the development trends of the industry, labour market and science.

**3.2.2. In the case of master's and doctoral study programmes, specify and provide the justification as to whether the degrees are awarded in view of the developments and findings in the field of science or artistic creation. In the case of a doctoral study programme, provide a description of the main research roadmaps and the impact of the study programme on research and other education levels (if applicable).**

**3.2.3. Assessment of the study programme including the study course/ module implementation methods by indicating what the methods are, and how they contribute to the achievement of the learning outcomes of the study courses and the aims of the study programme. In the case of a joint study programme, or in case the study programme is implemented in a foreign language or in the form of distance learning, describe in detail the methods used to deliver such a study programme. Provide an explanation of how the student-centred principles are taken into account in the implementation of the study process.**

The volume of the study programme is 160 CP / 240 ECTS. A single credit point is equal to 40 academic hour student workload. The amount of contact hours per credit point is between 30% and 40%. The remaining workload is the student's independent work. The description of each study course includes the organisation, tasks and assessment criteria for independent work. E-

environment is used for communication and informing students, submission of independent work and ensuring feedback.

An essential condition for the functioning of the study programme is the establishment of a programme management and quality assurance system. The quality assurance of study programme "Nutrition" is based on regular analysis and evaluation of the content of the study subject curriculum at the structural units implementing the programme and meetings of the Council of the Faculty of Rehabilitation; analysis and control of the study process, which is carried out regularly by analysing the content, quality of the study subject curriculum, results of student surveys and other indicators (e.g. student progress); ensuring integration of the study process and research work; strategic planning of the study process, analysing the strengths, weaknesses and development opportunities of study courses; cooperation with employers.

In the academic year 2020/2022, the joint Study Quality Council of the Bachelor's and Master's study programmes Nutrition and Dietetics of the Faculty of Rehabilitation, composed of employers, professional association, students, academic staff and the director of the study programmes, actively started its work. The Study Quality Council regularly discusses issues related to the study process. One of the most important issues discussed by the Study Quality Council is changes to the study programme plans before their annual approval by the Council of Deans. For example, in the academic year 2022/2023, issues related to study programme planning will be addressed with the transition to the European Credit Transfer and Accumulation System (ECTS).

The implementation of the study programme is ensured by the RSU Faculty of Rehabilitation Dean's Office, the Department of Sports and Nutrition and other RSU Departments, with the assistance of staff who are high-level professionals in their field, also from outside the RSU. The training takes place in RSU classrooms and the university's clinical learning centres. The support of the administrative and technical staff is very important and highly appreciated, given the many centres where the study programme is implemented. In the academic year 2012/2013, a significant improvement was achieved with the launch of the new Medical Education Technology Centre, which is developing rapidly and where a large part of study courses of the study programme is delivered, including pre-clinical professional study courses.

The studies are carried out in person as well as remotely, and a variety of teaching methods are used: lectures, practical classes, seminars, discussions, students' independent work (group projects, individual projects, individual research projects) and presentation of the projects prepared. RSU has implemented and is continuously improving the e-learning environment within the study programme. Rapid growth occurred during the Covid-19 pandemic. New study materials, including filmed video lectures, have been developed to support remote studies. The majority of the study programme consists of practical classes, during which professional skills are acquired. And the practical part is done in small groups, thus ensuring a personalised approach to students. If necessary, individual counselling is provided, and students' wishes and suggestions are listened to and taken into account. The leading teaching methods in study programmes are systems approach, situation analysis- and problem-oriented approach.

In recent years, serious work has been carried out to improve the planning of students' independent work and revision.

The e-learning environment is constantly being improved, both in terms of content and structure. This process is certainly facilitated by the training offered by the RSU Centre of Educational Growth on the development of e-learning environment, which is also actively used by the study programme lecturers.

The main forms of assessment of programme completion are test and examination. Such

examination forms as test works, colloquia, tests, practical demonstrations, presentations of independent works are also used. Cumulative assessments are increasingly being introduced in study courses, allowing students to be assessed and give feedback throughout the semester. Theoretical knowledge, practical skills, attitude and ability to interact with patients, their relatives and colleagues are assessed. Assessment system is being analysed and improved on a regular basis. The opinions of lecturers and students are taken into account.

During the placement, student fills in a placement logbook. Placement supervisor assesses both the practical skills and student's attitude towards the duties assigned during placement. The final assessment of placement (pass or fail) is given by the responsible lecturer at the faculty after defending the placement. Student may submit an appeal if they disagree with the assessment and/or file a complaint regarding assessment methods.

The national examination consists of a theoretical knowledge test (multiple choice test) and a practical skills demonstration (with a patient in a clinical setting) and has a total assessment with a higher proportion of the practical part (70%). During the Covid-19 pandemic, when access to patients in the clinical setting was limited, the practical part of the national examination took place in the e-environment. The procedure of the national examination is described in the Procedure of the National Examination, which was agreed at the meeting of the Quality Council of the study programme, at the meeting of the Council of the Faculty of Rehabilitation and approved by the RSU Council of Deans.

The national examination is evaluated by the national examination board, the head and composition of which is approved for the relevant academic year, and it operates in accordance with the RSU normative documents. Representatives of employers and professional associations are invited to the National Examination Board who make up more than 50% of the Board. The National Examination Board is chaired by a representative of employers or professional association.

All assessment criteria are in accordance with the Law on Higher Education Institutions and the Cabinet of Ministers Regulations No 240 Regulations on the National Standard of Academic Education of 13 May 2014 and Regulations of the Cabinet of Ministers of the Republic of Latvia No. 305 "Rules on the standard of state professional higher education".

The high motivation of students to learn should be noted, which is evident during the study process, especially when carrying out independent projects, as well as in student surveys and discussions with students. During the study process, students receive regular counselling, including before examinations and during the preparation of course papers and Bachelor's theses. While learning study subjects, students have access to methodological study materials prepared by lecturers in the e-environment, which stimulate students' independent work.

**3.2.4. If the study programme envisages an internship, describe the internship opportunities offered to students, provision and work organization, including whether the higher education institution/ college helps students to find an internship place. If the study programme is implemented in a foreign language, provide information on how internship opportunities are provided in a foreign language, including for foreign students. To provide analysis and evaluation of the connection of the tasks set for students during the internship included in the study programme with the learning outcomes of the study programme (if applicable).**

The total placement volume of study programme “Nutrition” is 23 CP / 34.5 ECTS.

The **objective** of the clinical placement is to strengthen the student’s knowledge, develop and improve practical skills and acquire competences in accordance with the professional standard of a nutritionist. During the placement, the student must observe, identify and analyse the specifics of the profession of nutritionist in relation to their wishes, interests and aspirations when choosing their future profession.

The scope and content of the placement stages are defined separately for each stage.

The placement is implemented in the 1st, 2nd and 4th year of full-time studies and in the 1st, 2nd, 4th and 5th year of part-time studies. The placement consists of the following stages:

- clinical placement (introductory placement) in a medical treatment institution;
- clinical placement in public institutions;
- clinical placement in a hospital: medical rehabilitation in a hospital and/or a day hospital and/or an outpatient setting;
- clinical placement in a hospital: medical rehabilitation of children in a hospital and/or a day hospital and/or an outpatient setting;
- clinical placement in an outpatient setting: outpatient medical rehabilitation;
- clinical placement in a rehabilitation centre: medical rehabilitation in a hospital and/or a day hospital and/or an outpatient setting.

The placement supervisor is a registered medical practitioner – a certified nutritionist, a physician-dietician or a doctor who has obtained the status of a person qualified to train.

The placement in the 2nd year of studies implemented in public institutions where nutrition policies are implemented is supervised by respective specialists of the field, most of whom are also alumni of the programme – nutritionists, but in this case the placement supervisor does not need a certificate.

The volume of clinical placement is sufficient to be able to start professional activity in accordance with the professional standard of a nutritionist.

Placement institutions:

- In the 1st year – Rehabilitation Centre Līgatne;
- In the 2nd year – Ministry of Health, scientific research institute Bior, Centre for Disease Prevention and Control (SPKC);
- In the 4th year – Riga Health Centre, Rehabilitation Centre Līgatne, Rehabilitation Centre Jaunķemeri, Riga Psychoneurology and Narcology Centre, Children’s Clinical University Hospital, Pauls Stradiņš Clinical University Hospital, Jūrmala Hospital.

### **3.2.5. Evaluation and description of the promotion opportunities and the promotion process provided to the students of the doctoral study programme (if applicable).**

### **3.2.6. Analysis and assessment of the topics of the final theses of the students, their relevance in the respective field, including the labour market, and the marks of the final theses.**



In the Research Methods II study course in the 6th semester of the full-time programme and in the 7th semester of the part-time programme, students are introduced to the thematic areas of the thesis and, at the end of the course, present their chosen Bachelor's thesis topic, which in most cases is developed and defended to completion. In the 7th and 8th semesters, scientific supervisors are appointed. Thematic areas of Bachelor's theses are offered by several RSU academic structural units (for example, the Department of Sports and Nutrition, the Department of Human Physiology and Biochemistry etc.). Topics of the Bachelor's thesis offered to students are reviewed, as well as supplemented with recommendations at the Study Programme Quality Council, which also includes representatives of employers, thereby ensuring the linking of research with the labour market and latest developments in the field of public health. The list of topics is drawn up by the director of the study programme and the list is given to students. A student shall choose the subject of the Bachelor's thesis and the supervisor of the Bachelor's thesis from the offered list in accordance with their interests. The final wording of the topic of the Bachelor's thesis is updated by the student in consultation with the scientific supervisor of the thesis.

Students have the right to suggest their own research topic and choose a thesis supervisor who agrees to supervise the respective Bachelor's thesis. The supervisor of a Bachelor's thesis must have a Master's or doctoral degree. The topics are approved at the meeting of the Council of the Faculty of Rehabilitation no later than six months before the defence of the Bachelor's thesis.

Students are regularly involved in research projects, a good example being the project Obesity, Dietary Habits and Vitamin D and Omega-3 Fatty Acid Parameters During Pregnancy (2020-2023), which is part of the Fundamental and Applied Research Projects (FLPP) of the Latvian Council of Science (LZP).

The following Bachelor's theses have been completed and defended:

- Pregnant Women's Diet and Its Effect on the Weight of the Newborn;
- B Vitamins in the Diet of Pregnant Women in Latvia;
- Iron Deficiency Anaemia and Dietary Habits of Pregnant Women in Latvia;
- The Role of Vitamin D in Pregnancy;
- Omega-3 Fatty Acids in the Diet and Erythrocytes of Pregnant Women.

Bachelor theses analyse and develop a wide range of topical issues in nutrition science. During the reporting period (academic years 2016/2017–2021/2022), students' Bachelor's theses can be grouped into the following thematic areas:

- **physical activity and nutrition**– e.g. assessment of physical activity and dietary habits in participants of the study Gut Microbiome Diversity in the Context of Health- And Lifestyle-Related Diets; Prevalence of Iron Deficiency in Female Athletes of the Latvian Olympic Winter Sports Team; Role of Nutrition in Maintaining and Sustaining Physical Performance in Cadets;
- **prevalence of malnutrition in different patient groups** – g. COVID-19 and Malnutrition: A Systematic Review; Connection of Malnutrition with Disease Outcome in Sepsis Patients, a Retrospective Study; Risk of Malnutrition in Thoracic Surgery Patients;
- **antioxidants in food products** – g. The Amount of Minerals in Milk with Different Fat Content; Antioxidant and Antiradical Capacity of Buckwheat; Comparison of Wild and Domestic Raspberry Leaf Tea; Antiradical and Antioxidant Properties of Latvian Beer and Beer Drinks; Determination of Antioxidants in Different Brands of Coffee Purchased in Latvian Outlets;
- **dietary habits of children and adolescents** – g. Family Feeding Practices of Primary School-Age Children During the COVID-19 Pandemic; Increasing Consumption and Access to

Drinking Water in Secondary School: A Pilot Study;

- **dietary habits of athletes in different sports** –g. Comparison of Dietary Habits of Teenage Floorball Team Players by Age Group; Comparison of Dietary Knowledge Between Amateur and Professional Basketball League Players;
- **dietary options for overweight and obesity correction** –g. Changes in Body Mass Index, Waist and Hip Circumference in Relation to the Healthy Plate Principle in Overweight Women; Prevalence of “Food Addiction” and Connection Thereof with Body Mass Index Among RSU Medical Students; Meat Consumption Patterns in Overweight and Obese People; Impact of Intermittent Fasting on Biomarkers and Body Weight in Persons with Metabolic Syndrome: A Systematic Review;
- **nutritional therapy in case of various conditions** – g. Dietary Habits of Patients with Depressive Disorders at the VSIA RPNC Outpatient Consultation Department; Adherence to Dietary Recommendations in Patients with Arterial Hypertension; Nordic Diet as a Therapeutic Method to Improve the Well-Being of Ulcerative Colitis Patients; Nutritional Assessment in Hospitalised Stroke Patients;
- **dietary habits of pregnant women**– e.g. Omega-3 Fatty Acids in the Diet and Erythrocytes of Pregnant Women;
- **nutrition and psychological factors of eating behaviour**– e.g. Parents’ Experiences of Diet Planning for Children Diagnosed with *Anorexia Nervosa* One Year After Treatment; Low Carbohydrate Diets (*GAPS*) for Children with Attention Deficit Disorder and Hyperactivity; Principles of Mindful Eating in Patients with Compulsive Eating Disorder.

The reflected analysis clearly shows that the topics of students' final theses are scrupulously selected, based on current events in the field of nutrition science and numbers in the labour market.

The final theses are evaluated by a competent commission, which, according to the regulatory framework of the Republic of Latvia, consists of representatives of the employer and the industry. It is commendable that the defense of final theses gives employers the opportunity to familiarize themselves with the conducted research in the field of nutrition science. Annex 22 "Themes of the students' final theses" contains both the topics of the final theses and the evaluations. The ratings are generally from 6 to 10 points, the most are ratings 8 and 9, followed by a rating of 7 points, then 10 points. Rating 6 – one. In order to ensure students' structured approach to the research work, the defense of the topic is carried out, which is followed by the pre-defense of the thesis and only then follows the defense of the Bachelor's thesis. Thus, it is ensured that the student receives the much-needed advice and guidance so that the bachelor's thesis is developed in an appropriate quality. Therefore, the evaluations of StP "Nutrition" are relatively high year after year.

### 3.3. Resources and Provision of the Study Programme

**3.3.1. Assessment of the compliance of the resources and provision (study provision, scientific support (if applicable), informative provision (including libraries), material and technical provision, and financial provision) with the conditions for the implementation of the study programme and the learning outcomes to be achieved by providing the respective examples.**

All available RSU resources are used in the implementation of the study programme as necessary.

The study programme-specific resources required for the professional study courses are available at the RSU Medical Education Technology Centre (METC), which houses the facilities required for the specialised study courses with appropriate equipment, including a modern and up-to-date kitchen classroom and body composition and metabolism measuring equipment. Each year, the department's budget includes funds to renew and supplement the resources needed for the study process. Heads of the study courses make their own proposals, which are taken into account in the budget planning. Suggestions are also made for new resources to be made available in the RSU library.

The students of the study programme have access to the extensive resources of the RSU library, which is essential to ensure a comprehensive study process, including the possibility to use the latest scientific information in the development of Bachelor's theses.

Availability of e-resources is the same in all structural units of the library, while most of the latest books in the field of rehabilitation are available at the METC branch of the library, where most of the study programme courses are delivered.

Over the past five years, the RSU library has acquired 338 books on nutrition and diet therapy (worth around €5,400). PEN: Practice-based Evidence in Nutrition database is subscribed to annually (£1,615 per year).

A search for information on the topic of Nutrition in the subscribed multidisciplinary databases indicates 730 e-books (Ebook Central (ProQuest)) and 2,122 e-books (EBSCO eBook Academic Collection).

Primo unified search engine lists around 100 e-journal titles under Nutrition and Dietetics.

In 2022, the RSU library reviewed the bibliography and literature provision of the StP Nutrition courses and concluded that it was generally very good and adequate to provide students with the necessary literature.

Four e-book databases and ten journal and text databases are available in the field of rehabilitation sciences.

The teaching staff involved in the implementation of study courses participate in seminars organised by the RSU library and get acquainted with its latest offer.

The Department of Sports and Nutrition has equipment and measuring instruments that are actively used for research work by teaching staff and students:

- indirect calorimetry device – Q-NRG metabolic monitor for a spontaneously breathing patient;
- portable bioimpedance device AKERN BIA 101 BIVA;
- body component analyser TANITA MC-780, printer;
- callipers;
- height meters and scales.

### **3.3.2. Assessment of the study provision and scientific base support, including the resources provided within the framework of cooperation with other science institutes and higher education institutions (applicable to doctoral study programmes) (if applicable).**

**3.3.3. Indicate data on the available funding for the corresponding study programme, its funding sources and their use for the development of the study programme. Provide information on the costs per one student within this study programme, indicating the items included in the cost calculation and the percentage distribution of funding between the specified items. The minimum number of students in the study programme in order to ensure the profitability of the study programme (indicating separately the information on each language, type and form of the study programme implementation).**

It is planned to finance the full-time study programme from the state budget and the funds of private and legal persons by setting the tuition fee in accordance with the state budget funding without social security in the amount of EUR 4890 of study year. Discounts on tuition fees are possible in accordance with internal regulatory documents. The number of students planned to reach in the four years of study of the full-time study programme is 81 students, with 21 students admitted in the first year of studies, and 1-2 students predicted to drop out in the following years. After high inflation and rapid increase in energy prices, the result of the full-time study programme with such tuition fee per year is negative due to the lack of funding from the state budget in accordance with the Cabinet Regulations No. 994 – the basic costs of studies no longer cover infrastructure maintenance costs. Information on the additional funding allocated for the performance funding, approved in the budget of the Ministry of Education and Science, will be available on 2nd half of 2023.

It is planned to finance the part-time study programme from the funds of private individuals and legal entities. It is planned to reach a total of 82 students in the StP of four years and six months, with 22 students enrolled in the first year of studies, and 3-5 students predicted to drop out in the following years. The tuition fee for the StP amounts to EUR 2800 per year, increasing it to EUR 3100 in the coming years, analysing the restrictions on the demand. After high inflation and rapid increase in energy prices, expenses of the study programme exceeded revenues, but in the long run the situation is stabilised with the revision of tuition fees.

The funding is used for staff remuneration, attraction of visiting lecturers, taxes, maintenance of IT infrastructure, purchase of equipment and facilities and expenditure on study visits. In addition to the direct costs of delivering lectures and conducting classes, the study programmes have to cover infrastructure maintenance costs (premises, IT solutions) and costs of other RSU common resources used in the study programmes. (Student services, Library, organisation of the study process, grant to the Student Union and other support and administrative functions).

The study programme is implemented by the Department of Sports and Nutrition, Department of Nursing and Midwifery, Department of Public Health and Epidemiology, Department of Health Psychology and Paedagogy of the Faculty of Public Health and Social Welfare, Department of Anaesthesiology and Intensive Care, Department of Occupational and Environmental Medicine, Department of Biology and Microbiology, Department of Human Physiology and Biochemistry, Department of Internal Diseases, Department of Surgery, Department of Pathology, Department of Paediatrics, Department of Psychiatry and Narcology, Department of Psychosomatic Medicine and Psychotherapy, Statistics Unit, Department of Clinical Skills and Medical Technology and Department of Morphology of the Faculty of Medicine, the Department of Rehabilitation of the Faculty of Rehabilitation, Department of Pharmacology, Department of Applied Pharmacy and Laboratory of Finished Dosage Forms of the Faculty of Pharmacy and the RSU Language Centre. Remuneration of academic staff for the first year of full-time study programme is planned at approximately EUR 52 000, for the part-time study programme at approximately EUR 44 000.

Table 2. Cost of the Full-Time Study Programme

<b>Title</b>	<b>Outcome with the existing tuition fee</b>	<b>Outcome with the expected tuition fee</b>
Average revenue per student, EUR	4 519	4 637
Average cost per student, EUR	5 232	5 283
Academic staff, %	47	47
Resources of departments, %	4	4
Other direct expenditure, %	2	2
Students' clinical training and placement costs, %	1	1
Scholarship costs, %	3	3
Ongoing costs, %	5	5
Overhead costs, %	38	38

Table 3. Cost of the Part-Time Study Programme

<b>Title</b>	<b>Outcome with the existing tuition fee</b>	<b>Outcome with the expected tuition fee</b>
Average revenue per student, EUR	2 605	2 884
Average cost per student, EUR	2 923	3 013
Academic staff, %	63	61
Resources of departments, %	5	5
Other direct expenditure, %	1	1
Students' clinical training and placement costs, %	2	2
Scholarship costs, %	29	31

### 3.4. Teaching Staff

**3.4.1. Assessment of the compliance of the qualification of the teaching staff members (academic staff members, visiting professors, visiting associate professors, visiting docents, visiting lecturers, and visiting assistants) involved in the implementation of the study programme with the conditions for the implementation of the study programme and the provisions set out in the respective regulatory enactments. Provide information on how the qualification of the teaching staff members contributes to the achievement of the learning outcomes.**

The qualification of teaching staff involved in the implementation of the study programme corresponds to the conditions of implementation of the study programme and the requirements of regulatory enactments, and ensures the achievement of objectives and learning outcomes of the study programme and respective study courses.

The qualification of the academic staff involved in the implementation of the study programme complies with the normative documents of the Republic of Latvia. The director of the professional Bachelor's study programme has the education of a dietician, she continuously improves her professional and pedagogical qualifications. The teaching staff involved in the study programme are professors of RSU departments, associate professors, assistant professors, lecturers and assistants from RSU structural units.

The lecturers involved in the implementation of the study programme are highly qualified professionals in their field. In total, StP Nutrition has involved 91 lecturers, of which 2 are professors and leading researchers, 7 - associate professors, 13 - assistant professors, 21 lecturers, the other 43 of involved lecturers are assistants, lesson teachers and invited lecturers.

Clinical placement supervisors are nutritionists certified by the Latvian Association of Diet and Nutrition Specialists with a Master's degree in health care or five years of professional experience, or eligible to train.

From 1 January 2017 to 1 October 2022, 72 lecturers of the Bachelor's study programme "Nutrition" participated in continuing education activities of the Centre for Educational Growth attending more than 160 training activities of different content. In total, teaching staff of the Nutrition study programme spent 6224 academic hours on continuing education activities.

The lecturers participated in the following activities:

- Creating Animated Visual Study Materials;
- Reference Management Tool EndNote;
- Remote Group Work of Students Using the Miro Tool;
- Open Access to Scientific Information;
- Collaboration and Partnership Towards Professional and Sectoral Development: Local, National, Transnational;
- *Contextualizing the Use of Webinar in Higher Education*;
- Creating Engaging and Interactive Classrooms through Active Learning Techniques;
- PubMed Database and Its Tools for Searching Scientific Publications;
- Possibilities and Comparison Of Web of Science and Scopus Databases;
- Digital Disruptors – The Changes and Innovations That Drive Organisations to Change;
- Teaching in a Cross-Cultural Environment;
- Think Tank: How to Assess to Learn?;
- Think Tank: Feedback as a Source of Cognition and Possibility for Self-Improvement;
- Creating Electronic Tests;

- Interactive Presentations and Real-Time Feedback in the Mentimeter Tool;
- Potential of Immersive Technologies for Efficient Learning Strategies;
- Improvisation in Pedagogical Work;
- How Games Activate Teaching and Learning;
- How to Promote the Acquisition of Transversal Skills Relevant to the Working Environment in the Study Process;
- How to Create Effective Image and Text Compositions in Learning Materials;
- Research Methodology and Statistical Processing of Data;
- Visualisation of Content in Presentations;
- Development of a Study Course. Formulation and Assessment of Learning Outcomes;
- Technology-Enriched Study Process;
- Turnitin: How to Assess Students' Papers in Higher Quality and More Effectively?;
- Creating Videos: Complex in a Simple and Short Way.

Summarising the information on teaching staff who are RSU alumni, it is concluded that 65 lecturers have graduated from RSU study programmes (from one to four), while 27 lecturers are currently (in the academic year 2022/2023) studying in one of the programmes.

27 out of 91 lecturers have a doctorate degree, which is 30% of the total number of lecturers; 7 StP lecturers are still continuing their doctoral studies. It should also be noted that supervisors and reviewers of students' final theses in about 25% of cases have a doctorate degree.

Heads of clinical practice, Ksenia Nikolaeva, Guna Bīlande and Olga Lubina are also currently studying for a doctorate, combining the clinical work of a nutritionist with academic studies, which can be evaluated very positively, as it makes an even greater contribution to the acquisition of clinical skills. The already acquired qualification of StP Nutrition teaching staff, which can be assessed as very good, and the active participation of lecturers in further education help to achieve excellent study results.

#### **3.4.2. Analysis and assessment of the changes to the composition of the teaching staff over the reporting period and their impact on the study quality.**

During the accreditation period, there have been no significant changes in the composition of teaching staff, but the growth of lecturers, successfully completing their doctoral studies in the RSU programme Medicine, for example, Inga Elksne, should be noted. During the accreditation period, new lecturers have been recruited who have started teaching after obtaining their Master's degree or are pursuing doctoral studies, and are highly qualified professionals in their field. For example, Jūta Golubova is involved in the implementation of study course Clinical Placement I, Zane Timpāre in study courses Introduction in Basics of Nutrition, Nutrition Policy and Food Legislation, and doctoral student Ksenija Nikolajeva – in study course Healthy Food Preparation.

Representatives of the professional environment are involved as invited lecturers in the implementation of the study programme: Ksenija Andrijanova, Ingrīda Millere, Kristīne Klaramunta-Antila, Līga Ārente.

#### **3.4.3. Information on the number of the scientific publications of the academic staff members, involved in the implementation of doctoral study programme, as published**

during the reporting period by listing the most significant publications published in Scopus or WoS CC indexed journals. As for the social sciences, humanitarian sciences, and the science of art, the scientific publications published in ERIH+ indexed journals or peer-reviewed monographs may be additionally specified. Information on the teaching staff included in the database of experts of the Latvian Council of Science in the relevant field of science (total number, name of the lecturer, field of science in which the teaching staff has the status of an expert and expiration date of the Latvian Council of Science expert) (if applicable).

**3.4.4. Information on the participation of the academic staff, involved in the implementation of the doctoral study programme, in scientific projects as project managers or prime contractors/ subproject managers/ leading researchers by specifying the name of the relevant project, as well as the source and the amount of the funding. Provide information on the reporting period (if applicable).**

**3.4.5. Assessment of the cooperation between the teaching staff members by specifying the mechanisms used to promote the cooperation and ensure the interrelation between the study programme and study courses/ modules. Specify also the proportion of the number of the students and the teaching staff within the study programme (at the moment of the submission of the Self-Assessment Report).**

The cooperation between the teaching staff members involved in the implementation of study courses, which is essential for the quality assurance of the implementation of the study programme, is ensured by various measures that take place within the framework of the structural units involved, the Department of Sports and Nutrition, the Faculty of Rehabilitation and the implementation of the course.

Before the beginning of each semester, the teaching staff involved in the implementation of the study course, the study work organiser and the head of placement, together with the head of the study course, review the planning of the study course and topical issues related to its implementation. To ensure the interconnection and continuity of study courses and to take into account the results of the student survey, the study programme director organises meetings with the heads of study courses as necessary.

The cooperation between the teaching staff members involved in the implementation of study courses, which is essential for the quality assurance of the implementation of the study programme, is ensured by various measures that are implemented within the framework of the structural units involved, the Department of Rehabilitation, the Faculty of Rehabilitation and the implementation of the study course. After the approval of the new professional standard of physiotherapist, the director of the study programme presented it to the heads of study courses and the current tasks were discussed. Work has started and is continuing to reduce the number of low-credit courses in the study programme and to switch to the European Credit Transfer and



Accumulation System (ECTS). These changes are being made in close cooperation with the lecturers involved.

The implementation of professional study courses is ensured by the Department of Sports and Nutrition, which facilitates close cooperation between lecturers involved in the implementation of study courses.

Lecturers from professional study courses are present during the Bachelor's theses development process, which includes both the presentation of the topics of Bachelor's theses and the pre-defence of Bachelor's theses.

Lecturers of professional study courses are involved in the joint preparation of questions and situational tasks (when used) for the national examination and in the joint post-examination analysis of students' mistakes.

The StP director organises regular remote meetings and exchanges of ideas with clinical placement supervisors.

The ratio of the number of students and teaching staff in the study programme is: 192 students and 111 lecturers. The ratio of students to teaching staff is 1.7.

# Annexes

III - Description of the Study Programme - 3.1. Indicators Describing the Study Programme		
Sample of the diploma and its supplement to be issued for completing the study programme	24.1_Anx_Sample_Diploma_and_Supplement_PBSP_Nutrition.pdf	24.1_Diploms_un_pielikums_PBSP_Uzturs.pdf
For academic study programmes - Opinion of the Council of Higher Education in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions (if applicable)		
Compliance of the joint study programme with the provisions of the Law on Higher Education Institutions (table) (if applicable)		
Statistics on the students in the reporting period	16_AnX_Statistics_Nutrition.pdf	16_pielik_Uzturs_statistika_lv.pdf
III - Description of the Study Programme - 3.2. The Content of Studies and Implementation Thereof		
Compliance with the study programme with the State Education Standard	17.1_pielik_PBSP_Fiziot_atbilstiba_izglitiba_standartam_ENG.pdf	17.1_pielik_PBSP_Uzturs_atbilstiba_izglitiba_standartam.pdf
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard or the requirements for professional qualification (if applicable)	18.2_AnX_Mapping_StP_to_Professional_Standard_Nutrition.pdf	18.2_Profesijas_standarta_kartejums_Uzturs.pdf
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)	17.2_AnX_Compliance_with_Field-Specific_Regulations_Nutrition.pdf	17.2_pielik_Atbalstiba_nozares_specifiskajam_regulejumam_Uzturs.pdf
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	18.1_AnX_Study_Course_Mapping_Nutrition.pdf	18.1_Studiju_kursu_kartejums_rezultatu_sasniesanai_PBSP_Uzturs .pdf
The curriculum of the study programme (for each type and form of the implementation of the study programme)	19_AnX_Study_Plan_Nutrition.pdf	19_pielik_StP_planojums_Uzturs.pdf
Descriptions of the study courses/ modules	20_AnX_Study_course_description_Nutrition.pdf	20_pielik_Kursu_apr_Uzturs.pdf
Description of the organisation of the internship of the students (if applicable)	9_AnX_Organisation_of_student_placement_Nutrition.pdf	9_pielikums_Studejoso_prakses_organizacijas_apraksts_Uzturs.pdf
III - Description of the Study Programme - 3.4. Teaching Staff		
Confirmation that the academic staff of the doctoral study programme includes not less than five doctors, of which at least three are experts approved by the Latvian Council of Science in the branch or sub-branch of science in which the study programme intends to award a scientific degree (if applicable)		
Confirmation that the academic staff of the academic study programme complies with the requirements specified in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions (if applicable)		

# Dentistry (49724)

Study field	<i>Health Care</i>
ProcedureStudyProgram.Name	<i>Dentistry</i>
Education classification code	<i>49724</i>
Type of the study programme	<i>Second level professional higher education programme (length of full time studies at least 5 years)</i>
Name of the study programme director	<i>Andris</i>
Surname of the study programme director	<i>Ābeltiņš</i>
E-mail of the study programme director	<i>Andris.Abeltins@rsu.lv</i>
Title of the study programme director	<i>Associate Professor/ Dr. med</i>
Phone of the study programme director	
Goal of the study programme	<i>The aim of the study programme in dentistry is to train qualified dentists with sufficient knowledge and practical skills to practise in general dentistry - to treat patients with diseases of oral cavity and teeth and to take practical and public education measures to prevent the aforementioned diseases.</i>
Tasks of the study programme	<i>1. Teach how to know and apply the latest scientific findings, and be able to critically evaluate the available information.</i>  <i>2. Develop skills to continue lifelong learning in the required direction with appropriate competences.</i>  <i>3. Teach how to provide emergency care in dental practice.</i>  <i>4. Teach how to plan treatment in simple and moderate cases regarding the oral cavity.</i>  <i>5. Teach the latest findings in other healthcare disciplines.</i>  <i>6. Teach the latest diagnostic techniques and their application in practice.</i>  <i>7. Teach ethics and the ability to communicate legally with the patient and relatives.</i>  <i>8. Acquire knowledge of basic business.</i>

Results of the study programme	<p>1. The student will be equipped with up-to-date knowledge of the professional field and the ability to apply the latest scientific achievements in clinical practice; will know the moral and ethical principles in patient care; will be able to use knowledge of biomedical and clinical sciences to assess normal and diagnose pathological conditions associated with the soft and hard tissues of the oral cavity; will be able to assess social, cultural and environmental factors contributing to health or disease and educate the patient about the aetiology and prevention of oral diseases; will be able to communicate in an understandable manner with the patient, his/her family, relatives and healthcare professionals.</p> <p>2. Able to independently direct the development of own competences and use modern self-improvement techniques, including simulation-based methods, to use only patient-safe means, methods and measures.</p> <p>3. Provide emergency care and be able to apply manipulations appropriate to the occupational standard in a patient-safe manner, regularly improving their skills by using innovative techniques and evidence-based methods.</p> <p>4. Able to independently formulate and critically analyse complex situations in relation to oral and general health conditions, including emergencies, to justify decisions, to achieve optimal treatment outcomes if necessary, through further analysis, to critically evaluate them and to recommend further action steps, taking responsibility for the planned solutions.</p> <p>5. Able to integrate knowledge from different fields of medicine, apply it in practice in a way that is optimal for the patient, participate in research and contribute to the development of new diagnostic or therapeutic methods.</p> <p>6. Develop or engage into a business and apply basic legal and other knowledge in their activity.</p> <p>7. Able to organise cooperation, including with the participation of professionals from different disciplines, to choose appropriate working approaches, deal with non-standard situations, take responsibility for the diagnostic or therapeutic results achieved and analyse them. Develop or engage into a business and apply basic legal and other knowledge in their activity.</p> <p>8. Able to communicate with a patient and their relatives in a legally correct and ethical manner.</p>
Final examination upon the completion of the study programme	Scientific research work and National Examination

## Study programme forms

**Full time studies - 5 years - latvian**

Study type and form	<i>Full time studies</i>
Duration in full years	5
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	200
Admission requirements (in English)	<i>Secondary education:</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>Degree of Doctor of Dental Surgery</i>

#### **Places of implementation**

<b>Place name</b>	<b>City</b>	<b>Address</b>
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

#### **Full time studies - 5 years - english**

Study type and form	<i>Full time studies</i>
Duration in full years	5
Duration in month	0
Language	<i>english</i>
Amount (CP)	200
Admission requirements (in English)	<i>Secondary education: For studies in English, a minimum B2 level of proficiency in English.</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>Degree of Doctor of Dental Surgery</i>

#### **Places of implementation**

<b>Place name</b>	<b>City</b>	<b>Address</b>
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

### 3.1. Indicators Describing the Study Programme

**3.1.1. Description and analysis of changes in the parameters of the study programme made since the issuance of the previous accreditation form of the study field or issuance of the study programme license, if the study programme is not included on the accreditation form of the study field, including changes planned within the evaluation procedure of the study field evaluation procedure.**

Table 1. Changes in the StP Parameters

No.	Parameter	Description and analysis of changes in the StP parameters during the accreditation period (until 2022)	Planned changes within the assessment procedure (after the accreditation)
1.	Study direction	—	—
2.	Title of the StP	—	—
3.	Code according to the Latvian Education Classification	—	—
4.	Head of the StP	—	—
5.	Academic degree of the head of the StP	—	—
6.	Objective of the StP	—	—
7.	Tasks of the StP	—	—

No.	Parameter	Description and analysis of changes in the StP parameters during the accreditation period (until 2022)	Planned changes within the assessment procedure (after the accreditation)
8.	Learning outcomes to be achieved	—	The study results have been specified in accordance with the study objective, tasks and descriptions of knowledge, skills and competences corresponding to the 7th level of the Latvian Qualifications Framework (which corresponds to the European Qualifications Framework) (hereinafter – LQF/EQF), as well as the QAHE guidelines on the number of outcomes <sup>[1][2]</sup> . Thus, the competences, knowledge and skills learned in individual courses in a logical sequence contribute to the achievement of the defined study results. Mapping has allowed the programme management to better review the interaction between the competences, knowledge and skills to be acquired in individual courses and the compliance of the study programme outcomes with the objectives and tasks.
9.	Final examination upon the completion of the StP	—	—
10.	Type and form of studies	—	—
11.	Duration of implementation	—	—
12.	Language of implementation	—	—
13.	Volume of the StP (CP)	—	—

No.	Parameter	Description and analysis of changes in the StP parameters during the accreditation period (until 2022)	Planned changes within the assessment procedure (after the accreditation)
14.	Admission requirements	—	—
15.	Degree to be awarded	—	—
16.	Qualification to be awarded	—	—
17.	Place of implementation	—	—

Table 1 demonstrates that the study programme meets the accreditation requirements.

The table clearly shows that the changes in the programme have not been extensive. In addition to the table contents, the programme has been revised and the course content updated during the reporting period. A new study course Integrated Placement in Dentistry (6 CP / 9 ECTS) has been created, combining study courses Integrated Dentistry and Paediatric Dentistry. The study course/placement lasts 6 weeks and is implemented in a real clinical setting outside RSU clinical base units.

In preparation for accreditation, changes have been made in the programme in relation to the professional standard, compliance with which has been assessed in Annex 18.1, mapping it against the content of the StP and making adjustments to the titles and content of individual study courses (course descriptions in Annex 20).

[1] Recommendations for the preparation of the description/self-assessment report. – QAHE, 02.11.2021. Available at:

<https://www.aika.lv/ieteikumi-raksturojuma-pasnovertejuma-zinojuma-sagatavosana/>

[2] Practical guide Formulating and Using Learning Outcomes published on the website of the Quality Agency for Higher

Education: [https://www.aika.lv/wp-content/uploads/2020/05/Studiju-rezult%C4%81tu-formul%C4%93%C5%A1ana-un-izmanto%C5%A1ana\\_praktisk%C4%81-rokasgr%C4%81mata.pdf](https://www.aika.lv/wp-content/uploads/2020/05/Studiju-rezult%C4%81tu-formul%C4%93%C5%A1ana-un-izmanto%C5%A1ana_praktisk%C4%81-rokasgr%C4%81mata.pdf)

### **3.1.2. Analysis and assessment of the study programme compliance with the study field. Analysis of the interrelation between the code of the study programme, the degree, professional qualification/professional qualification requirements or the degree and professional qualification to be acquired, the aims, objectives, learning outcomes, and the admission requirements. Description of the duration and scope of the implementation of the study programme (including different options of the study programme implementation) and evaluation of its usefulness.**

The title of the study programme, the degree to be acquired, professional qualification or degree and professional qualification, objectives, tasks, learning outcomes and admission requirements of the study programme are mutually consistent.



Study programme “Dentistry” is one of the fundamental study programmes of RSU that has been implemented and developed for a long time, the relevance of which to the Health Care study direction is fully established and clear. The development and implementation of study programme “Dentistry” takes into account the normative documents:

- Education Law,
- Law on Higher Education Institutions,
- Regulations of the Cabinet of Ministers No. 305 “Regulations on the National Standard of the Professional Higher Education”  
(<https://likumi.lv/ta/id/342818-noteikumi-par-valsts-profesionalas-augstakas-izglitibas-standartu>),
- Law On the Regulated Professions and the Recognition of Professional Qualifications (Chapter III, Section 12) .  
(<https://likumi.lv/ta/id/26021-par-reglamentetajam-profesijam-un-profesionalas-kvalifikacijas-atzisanu>),
- Cabinet Regulation No 68 “Minimum Requirements of Educational Programmes for the Acquisition of the Professional Qualification of Dentist, Pharmacist, Nurse and Midwife”  
(<https://likumi.lv/ta/id/59364-izglitibas-programmu-minimalas-prasibas-zobarsta-farmaceita-masas-un-vecmates-profesionalas-kvalifikacijas-iegusana>)
- Directive 2005/36/EC of the European Parliament and of the Council of 7 September 2005 on the recognition of professional qualifications  
<https://eur-lex.europa.eu/legal-content/LV/TXT/?uri=CELEX:32005L0036>

In 2020, study programme “Dentistry” participated in the European Commission DG GROW project Mapping and Evaluation of the Development of the Sectoral Professions According to Directive 2005/36/EC: Section 1 – The Profession of Dental Practitioner. Project number is 817/PP/GRO/IMA/19/1131/10885. Study programme “Dentistry” complies with EU directives and national legislation on regulated specialities.

The study programme leads to the following professional qualification: doctor of dental surgery.

A dentist is a medical practitioner who has received education that meets the requirements set out in the Law on the Regulated Professions and the Recognition of Professional Qualifications. Within the scope of professional activity, a dentist carries out prevention, diagnosis and treatment of diseases of the alveolar process and oral mucosa, jaws and related tissues, and studies the origin and possible prevention of these diseases. The programme’s affiliation to the study direction is therefore clear and justified.

A dentist works in a medical treatment institution and is responsible for the results of their professional activities. Only a certified dentist may carry out independent medical treatment in accordance with the procedure laid down in the regulatory enactments.

The duration of the study programme is 5 years and 200 CP / 300 ECTS. Studies are implemented as full-time regular studies. Studies take place in both pre-clinical and clinical settings. The study programme is implemented in Latvian and English. The studies are vertically and horizontally integrated.

The admission criteria for the Dentistry study programme are designed to select students who are motivated to study and can successfully adapt to the study process.

Applicants of the Dentistry study programme are enrolled according to the competition results, which are made up of the CE assessments in mathematics, Latvian, foreign language, chemistry and biology. 100% of the overall assessment of the admission results are composed of:

- 5% of the total assessment is the CE assessment in mathematics,
- 10% of the total assessment is the CE assessment in Latvian language,
- 5% of the total assessment is the CE assessment in a foreign language or an international testing institution's examination assessment in a foreign language,
- 40% of the total assessment is the CE assessment in biology,
- 40% of the total assessment is the CE assessment in chemistry.

After completing the undergraduate study programme, alumni have the opportunity to continue their studies in residency (orthodontics, endodontics, prosthodontics, paediatric dentistry, periodontics) or doctoral study programmes.

Enclosed:

Annex 24.1. Model Diploma and Supplement Thereto.

Annex 24.8. Study Contract Sample.

### **3.1.3. Economic and/ or social substantiation of the study programme, analysis of graduates' employment.**

The study programme is financially viable and has stable income. The share of the state budget in the study programme's total financial flow is 15%, the rest is earned by the university. The study programme is designed to enable alumni to start working immediately after graduation. Recent graduate surveys show >90% employment. There are currently approximately 1600 certified dentists in Latvia, a significant proportion of whom are of pre-retirement and retirement age. According to the Register of Medical Practitioners, as at 1 January 2023, there are 1,646 dentists in the dental profession, 44% of whom are aged 55 and over. These data point to the need for new specialists. There is also a trend in Latvia towards a shortage of dental specialists, mainly in remote regions and rural areas. According to the Register of Medical Practitioners, there is also a shortage of specialists in the dental sub-specialties – orthodontists, paediatric dentists, periodontists, endodontists and prosthodontists. This highlights the need to produce capable, motivated professionals who are interested and willing to improve their knowledge and competences in postgraduate training programmes. Attracting new lecturers to the study process is also a very important factor for the sustainability of the Dentistry study programme. Competition for state-funded study places is consistently high at 6-7 applicants per place. For example, in 2022 there were 10 candidates per state-funded study place. RSU Faculty of Dentistry is the only educational institution in Latvia that educates dental specialists in Latvian. In cooperation with the regions, students are trained at the expense of the municipality, and after graduating from the programme, young specialists continue their careers in the regions, for example in Daugavpils.

As the StP "Dentistry" is also implemented in English, there is also a high demand for these study places. After completing their studies, foreign students successfully find a job in their home country.

Employers are surveyed at the meetings of the Latvian Dental Association and are involved in the Faculty Council, which convenes regularly and takes all major decisions related to the implementation of the programme in high quality.

### **3.1.4. Statistical data on the students of the respective study programme, the dynamics of**

**the number of the students, and the factors affecting the changes to the number of the students. The analysis shall be broken down into different study forms, types, and languages.**

The RSU Faculty of Dentistry offers 24 state-funded study places and 24 places for tuition fee for the 2023/2024 academic year due to high demand and the demographics of the profession. Study programme “Dentistry” is characterised by a low drop-out rate during studies. This is due to the high competition for admission to the Faculty of Dentistry, as well as the high entry criteria, which require a CE in both biology and chemistry. A big factor in the low drop-out rate is the high motivation of students in the Latvian part of the programme. In the English part of the programme, this motivation is lower and thus the drop-out rate is higher. An important factor in the relatively higher drop-out rate in the English part of the programme is that at different stages of their studies, students are able to get study places in their home country. In recent years, there has been an increase in demand for study places for tuition fee at the Faculty of Dentistry, which is attributed to the labour market demand for young specialists and the perception of employment prospects among applicants.

For information on student mobility, see Annex 8.2. It can be seen in summarised form in Table 1.

**Table 1. Student Mobility in Second-Level Professional Study Programme “Dentistry”**

<b>Academic year</b>	<b>Outgoing mobility of students</b>	<b>Incoming mobility of students</b>
2015/2016	6	3
2016/2017	2	4
2017/2018	2	3
2018/2019	5	4
2019/2020	3	5
2020/2021	4	1
2021/2022	5	1
Total from academic year 2015/2016 to academic year 2021/2022	27	21

The summary in Table 1 shows that students have taken advantage of mobility opportunities, which is positive. These Erasmus mobilities broaden students’ horizons and give them more opportunities to explore professional activities.

Enclosed:

Annex 16. Statistical Data on Students.

Annex No. 8.2. Statistical Data on Student Mobility.

**3.1.5. Substantiation of the development of the joint study programme and description and evaluation of the choice of partner universities, including information on the development and implementation of the joint study programme (if applicable).**

Not applicable.

## **3.2. The Content of Studies and Implementation Thereof**

**3.2.1. Analysis of the content of the study programme. Assessment of the interrelation between the information included in the study courses/ modules, the intended learning outcomes, the set aims and other indicators with the aims of the study course/ module and the aims and intended outcomes of the study programme. Assessment of the relevance of the content of the study courses/ modules and compliance with the needs of the relevant industry, labour market and with the trends in science on how and whether the content of the study courses/ modules is updated in line with the development trends of the relevant industry, labour market, and science.**

The Dentistry study programme is implemented by the RSU Faculty of Dentistry (information in [Latvian](#), [English](#)) and departments:

- Department of Oral and Maxillofacial Surgery and Oral Medicine (information in [Latvian](#), [English](#))
- Department of Orthodontics (information in [Latvian](#), [English](#))
- Department of Prosthetic Dentistry (information in [Latvian](#), [English](#))
- Department of Conservative Dentistry and Oral Health (information in [Latvian](#), [English](#)).

The RSU Institute of Stomatology serves as a clinical base unit for student training (information in [Latvian](#), [English](#), additionally in Latvian only: <https://stomatologijasinstituts.lv/>).

And other RSU structural units not directly related to the Dentistry programme, which also provide study courses such as basic study courses (Anatomy; Physiology; Histology; Embryology), general study courses (Latin; Philosophical Anthropology, Economics), general medicine study courses (Paediatrics, Infectious Diseases, Otorhinolaryngology).

Study courses in the Dentistry study programme are implemented in almost all departments under the Faculty of Medicine. Training also takes place in all major hospitals – RAKUS and PSKUS.

The StP “Dentistry” includes basic study courses, preclinical study courses and clinical study courses. Preclinical courses equip students with the skills they will need to work with patients in the clinical setting. Students acquire preclinical skills both on manikin heads and through simulation <https://www.rsu.lv/en/dentistry-pre-clinic>. After successful completion of pre-clinical study courses, students continue to improve their knowledge, competences and skills in a clinical environment at the RSU Institute of Stomatology. All study courses use different forms of study for content acquisition – lectures, seminars, practical and laboratory work, work in a clinical environment. Heads of study courses are responsible for adapting the study content to the latest scientific trends.

Course descriptions are reviewed, updated and approved annually.

In the last semester of studies, there is a compulsory external placement, where students have the opportunity to test and improve the practical knowledge, skills and competences acquired during their studies and to understand their strengths and weaknesses in real-life conditions under the guidance of a certified placement supervisor.

The study programme is vertically and horizontally integrated. Study courses are updated in line with the latest scientific and clinical knowledge. The Institute of Stomatology, as a clinical base unit, works to maximise the learning environment and the technologies used (information in [Latvian, English](#)).

Enclosed:

Annex 17.1. Compliance of the Study Programme with the National Educational Standard.

Annex 17.2. Compliance of the Study Programme with the Field-Specific Regulations.

Annex 18.2. Compliance of the Qualification to Be Acquired Upon Completion of the Study Programme With the Professional Standard

Annex 19. Planning of the Study Programme (For Each Type and Form of the Implementation of the Study Programme).

Annex 20. Description of Study Courses.

Annex 18.1. Mapping of the Study Courses for the Achievement of Learning Outcomes of the Study Programme.

**3.2.2. In the case of master's and doctoral study programmes, specify and provide the justification as to whether the degrees are awarded in view of the developments and findings in the field of science or artistic creation. In the case of a doctoral study programme, provide a description of the main research roadmaps and the impact of the study programme on research and other education levels (if applicable).**

The degree of a doctor of dental surgery is awarded on the basis of the results of the student's Scientific Research Paper and successful completion of the National Examination.

Students can choose their own topics for their scientific research work – thus stimulating their interest in the scientific field – or choose from the topics offered. Students may take the national examination only after successfully defending the Scientific Research Paper. The national examination consists of several parts – an accumulated practical part, a theoretical written part and a clinical case analysis, both written and oral. Clinical case analysis includes the development of a comprehensive treatment plan.

A special board is formed to evaluate both the National Examination and the Scientific Research Paper, which consists of the academic staff of the RSU Faculty of Dentistry, representatives of employers, and representatives of the Latvian Dental Association.

**3.2.3. Assessment of the study programme including the study course/ module implementation methods by indicating what the methods are, and how they contribute to**

**the achievement of the learning outcomes of the study courses and the aims of the study programme. In the case of a joint study programme, or in case the study programme is implemented in a foreign language or in the form of distance learning, describe in detail the methods used to deliver such a study programme. Provide an explanation of how the student-centred principles are taken into account in the implementation of the study process.**

The study programme is designed to simultaneously learn basic courses, general education courses, as well as professional courses. The sequence of courses is designed to move from simpler to more complex ones. Knowledge acquired in previous years is integrated and developed in subsequent years. The sequence of courses is strict, so that each step follows the previous one. The compatibility between the basic and professional subjects is maximised. Training in dentistry disciplines starts with pre-clinical training, where students learn in detail different manipulations on models. Virtual simulators play an important role in the pre-clinical phase, as they allow tasks to be tailored and varied in duration until the required skills are achieved. Virtual simulators are the most effective way to apply a student-centred approach, as they allow to individually adapt the workload, the degree of difficulty and to let the student take responsibility for their own work, to oversee the formation and development of their personal professional skills. In the clinical phase, training takes place in groups of 8, with one student as a doctor and one as an assistant. This situation allows skills to be developed in high quality and improved in action. Classes are supervised by lecturers with developed evaluation criteria. Digital data processing is introduced in the study process with the use of intraoral scanners, digital planning and design. All of the above allows us to get as close as possible to the study programme's outcome – a dentist able to work independently.

Regular updating and adding of the content of examinations is being worked on in the study courses. In a number of study courses, oral examinations have been converted into written examinations. Some of these are implemented in the form of e-tests, both with and without Respondus LockDown Browser. In the e-learning environment, students have access to self-assessment tests for better learning of the study material. Pre-clinical study courses use simulation-based practical skills training. Updating of study courses is continuous in clinical courses, many of which use a clinical case as an examination, which includes both medical and dental information. National examination cases are updated completely every year. SIMODONT dental simulators and COBRA surgical simulators are included as a mandatory part of several courses of the study programme.

At the end of the study programme – at the end of the 10th semester, students take the National Examination to evaluate their theoretical knowledge and practical skills. The national examination is held in accordance with the Regulation, which is reviewed and approved annually at the meeting of the Council of the Faculty of Dentistry and the RSU Council of Deans. The National Examination Board consists of the Dean of the Faculty of Dentistry, the Dean of the International Admissions Office, heads of departments of dental disciplines, representatives from the Board of the Latvian Dental Association and employers' institutions. The Chair of the National Examination Board is an expert in the field who has not been involved in the study process. In 2019, the Chair of the State Examination Commission was Dr. Maija Drīksne, Board Member of the Latvian Dentists Association.

**3.2.4. If the study programme envisages an internship, describe the internship opportunities offered to students, provision and work organization, including whether the higher education institution/ college helps students to find an internship place. If the**

**study programme is implemented in a foreign language, provide information on how internship opportunities are provided in a foreign language, including for foreign students. To provide analysis and evaluation of the connection of the tasks set for students during the internship included in the study programme with the learning outcomes of the study programme (if applicable).**

Study placement is provided at the RSU Institute of Stomatology during the study courses, as well as outside them, as an external placement.

Study placement, which is provided during the study courses, takes place in the student clinics of RSU Institute of Stomatology under the supervision of experienced specialists. Academic staff is involved in the implementation of clinical classes, and highly qualified specialists from leading dental clinics in Latvia are increasingly being recruited.

The external placement is provided in the amount of 4 CP / 6 ECTS in the summer between the 4th and 5th year as a B study course Study Placement in Therapeutic Dentistry (ZTMVK\_028) and in the amount of 6 CP / 9 ECTS during the 10th semester as an A study course Integrated Placement in Dentistry (ZTMVK\_055).

The placement opportunities are quite wide and cooperation has been established with a number of placement providers both in Latvia and abroad, for example, Dalarna province patient fund in Sweden; Liepāja and Daugavpils municipal outpatient clinic; many private practices. It is therefore possible to provide placement opportunities for international students.

In most cases, students find their own placement institutions, but the Faculty can provide placement where necessary.

Students submit a placement report on the work done during their placement, which is evaluated. Placement tasks are assigned that should be carried out and highlights the manipulations to be performed.

**Table 2. Implementation of Placement in Dentistry**

<b>Name of the placement</b>	<b>Category</b>	<b>Semester</b>	<b>CP/ECTS</b>	<b>Venue</b>	<b>Regulating document, supervisors</b>
<b>1. Study Placement in Therapeutic Dentistry (ZTMVK_028)</b>	B	in the summer between years 4 and 5	4 CP / 6 ECTS	Dental clinics	Placement supervisor?
<b>2. Maxillofacial Surgery MUSZKK_003</b>	A	7.	2 CP / 3 ECTS	Student clinics of RSU Institute of Stomatology?	Ģirts Šalms, Ieva Bāgante, Ilze Akota, Kaspars Stāmers

<b>3. Dental prosthetics - clinic ZPK_015</b>	A	8.	2 CP / 3 ECTS	Student clinics of RSU Institute of Stomatology?	Aira Kalniņa, Anda Slaidiņa, Anita Plotniece Baranovska, Antra Ragauskā, Dina Lietuviete Vēvere, Elīna Blūma, Guntis Žīgurs, Kārlis Krāģis, Mārtiņš Reiņikovs, Pauls Vītols, Sanita Grīnberga, Una Soboļeva
<b>4. Study Placement in Therapeutic Dentistry ZTMVK_028</b>	B	8.	2 CP / 3 ECTS	Dental clinics	Placement supervisor?
<b>5. Integrated Dentistry ZPK_026</b>	A	9.	4 CP / 6 ECTS	Student clinics of RSU Institute of Stomatology?	Anita Plotniece Baranovska, Elīna Blūma, Kārlis Krāģis, Sanita Grīnberga
<b>6. Therapeutic Dentistry ZTMVK_057</b>	A	7.	3 CP / 4.5 ECTS	Student clinics of RSU Institute of Stomatology?	Arīna Burnašova, Ieva Jeļisejeva, Ingrīda Krasta, Inguna Rence- Bambīte, Iveta Ābola, Karina Kopmane-Račko, Klevere Klevere Jekaterina, Kīse Darja, Oksana Vasiļjeva, Simona Skrīvele, Tatjana Stankeviča



<b>7. Integrated Placement in Dentistry (ZTMVK_055)</b>	A	10.	6 CP / 9 ECTS	Dental practices	Integrated Dentistry Placement Programme and Procedure, Head of the Department of Conservative Dentistry and Oral Health Professor Anda Brinkmane
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Enclosed:

9.1. Description of the organisation of placement of the students

9.2. Information on the agreements and other statements confirming the placement of the students in companies

### **3.2.5. Evaluation and description of the promotion opportunities and the promotion process provided to the students of the doctoral study programme (if applicable).**

Not applicable.

### **3.2.6. Analysis and assessment of the topics of the final theses of the students, their relevance in the respective field, including the labour market, and the marks of the final theses.**

The students' final topics are adapted to the current scientific innovations of the departments of the Faculty of Dentistry and the scientific projects in which the departments are involved. Students can choose the topic of their paper.

In addition, an example can be mentioned that within the Baltic Biomaterials Centre of Excellence (BBCE), students participate in research related to osteoporosis in the jaw area, as well as in the use of virtual simulators in dental education. Students also take part in projects involving 3D examinations of the maxillofacial region. As of 2023, a section (criteria) for the evaluation of Scientific Research Papers has been developed and approved by the Council of the Faculty of Dentistry and at the same time as a guideline for students on how Scientific Research Papers will be assessed. A committee is set up to evaluate students' Scientific Research Papers. Each student's Scientific Research Paper is evaluated by a reviewer appointed by each department. After evaluating the reviewer's opinion and the student's presentation, the final assessment of the Scientific Research Paper is prepared. The minimum grade is "4".

### 3.3. Resources and Provision of the Study Programme

**3.3.1. Assessment of the compliance of the resources and provision (study provision, scientific support (if applicable), informative provision (including libraries), material and technical provision, and financial provision) with the conditions for the implementation of the study programme and the learning outcomes to be achieved by providing the respective examples.**

The Faculty of Dentistry has Institute of Stomatology at its disposal (information in [Latvian](#), [English](#)), which is the largest clinical base unit in the Baltic States in the field of dentistry. All the dental sub-specialties are represented in the Institute of Stomatology and there is a large number of patients ready to be treated by students.

Students also work in the PSKUS Oral and Maxillofacial Department and the RAKUS Oncology Centre. In surgery specialties, students mainly observe or assist in surgeries and perform simple dressing procedures.

3 rooms with training dummies and 2 rooms with simulators are available for student pre-clinic training. <https://www.rsu.lv/en/dentistry-pre-clinic>. In these facilities, students have the opportunity to develop and improve their skills for future work with patients in conditions as close to the real clinical environment as possible.

Students have access to six clinical rooms at RSU, at the Institute of Stomatology students work with patients both as doctors (under the supervision of experienced specialists) and as dental assistants, as well as observers and assistants in operating theatres.

Students have access to study laboratories in both the pre-clinic and the clinic (RSU Institute of Stomatology serves as a clinical base unit for student training). Given the large number of students, larger and more clinical spaces would be needed to distribute the workload more evenly and optimally for both students and lecturers.

Enclosed:

Annex 23.1. Assessment of the Information and Methodological Base of Library Resources

**3.3.2. Assessment of the study provision and scientific base support, including the resources provided within the framework of cooperation with other science institutes and higher education institutions (applicable to doctoral study programmes) (if applicable).**

Not applicable.

**3.3.3. Indicate data on the available funding for the corresponding study programme, its funding sources and their use for the development of the study programme. Provide information on the costs per one student within this study programme, indicating the items included in the cost calculation and the percentage distribution of funding between**

**the specified items. The minimum number of students in the study programme in order to ensure the profitability of the study programme (indicating separately the information on each language, type and form of the study programme implementation).**

The StP is planned to be financed from state budget funds and the funds of individuals and legal entities setting the tuition fee of EUR 13000 in the Latvian flow, EUR 14000 in the English flow in the first two years of studies and EUR 15000 in years of studies 3 – 5. The study programme in the Latvian flow has state funding for 120 budget funded places, where the funding per one study place is EUR 7193 per year of studies, which is conceptually smaller than the costs per student. The number of students planned to be achieved in the Latvian flow in five years of studies is 206 students, enrolling 44 students in the first year of studies and planning a small drop-out in the following years. The number of students planned to be achieved in the English flow in five years of studies is 283 students, enrolling 60 students in the first year of studies and planning drop-outs of 1-3 students per year in the following years. Such a number of students is optimal to ensure a high-quality study process and to make the study programme cover its implementation, as well as development costs.

Funding is used for staff remuneration, attraction of visiting lecturers, taxes, maintenance of IT infrastructure, purchase of equipment and devices. In addition to the direct costs of the implementation of lectures and classes, the StP must cover the infrastructure maintenance costs (facilities, IT solutions) and other RSU common resources used in StP (Student Service, Library, organisation of the study process, grant for the Student Union and other support and administrative functions).

StP is implemented by the RSU Faculty of Dentistry Department of Conservative Dentistry and Oral Health, Department of Prosthetic Dentistry, Academic School of Dental Hygiene, Department of Oral and Maxillofacial Surgery and Dean's office of the Faculty of Dentistry, Department of Orthodontics, Faculty of Medicine Department of Psychosomatic Medicine and Psychotherapy, Statistical Unit, Department of Biology and Microbiology, Institute of Anatomy and Anthropology Department of Morphology, Department of Pathology, Department of Anaesthesiology and Intensive Care, Department of Occupational and Environmental Medicine, Department of Human Physiology and Biochemistry, Department of Physics, Department of Internal Diseases, Department of Surgery, Department of Otorhinolaryngology, Department of Paediatrics, Department of Infectology, Department of Clinical Skills and Medical Technologies and Department of Dermatology and Venereology, Faculty of Public Health and Welfare Department of Sports and Nutrition, Department of Nursing and Obstetric Care and Department of Public Health and Epidemiology, Faculty of Pharmacy Department of Pharmacology, Faculty of Rehabilitation Department of Rehabilitation, Department of Humanities and Language Centre. Remuneration of the academic staff in the first year of the Latvian flow StP is planned to be approximately 176 thousand EUR and approximately 326 thousand EUR in the English flow study programme.

Table 2. **Information on student costs**

**Costs of the study programme in the Latvian flow**

Name	Result with the existing tuition fee
Average income per student, EUR	9440

Average cost per student, EUR	9274
Academic staff, %	43
Department resources, %	28
Other direct expenditure, %	1
Scholarships, %	2
Fixed costs, %	4
Overheads, %	22

#### **Costs of the study programme in the English flow**

<b>Name</b>	<b>Result with the existing tuition fee</b>
Average income per student, EUR	13839
Average cost per student, EUR	11964
Academic staff, %	45
Department resources, %	19
Other direct expenditure, %	1
Fixed costs, %	3
Overheads, %	32

### **3.4. Teaching Staff**

**3.4.1. Assessment of the compliance of the qualification of the teaching staff members (academic staff members, visiting professors, visiting associate professors, visiting docents, visiting lecturers, and visiting assistants) involved in the implementation of the study programme with the conditions for the implementation of the study programme and the provisions set out in the respective regulatory enactments. Provide information on how the qualification of the teaching staff members contributes to the achievement of the learning outcomes.**

Implementation of the compulsory and restricted elective part of the second-level professional study programme "*Dentistry*" is ensured by 253 lecturers, 94 of whom have been elected to

academic positions of RSU. Of the 94 elected academic staff members, 11 are professors and 13 associate professors (for more information, see Annex 24.7: Analysis of the Composition of the Teaching Staff).

Dentistry is characterised by a severe shortage of teaching staff and researchers throughout Europe and the USA. This is due to the marked difference in income between those in private practice and those in academia. Work is being done with sub-specialty residents to motivate them for doctoral studies and to continue, albeit partially, an academic career. The Faculty of Dentistry has a large number of invited lecturers – 68. There are 61 elected positions. Part-time and invited lecturers are involved in the work to ensure the same quality of studies across study courses. There is a strong effort to standardise and objectively assess the types of examinations with standardised assessment tables, digital tools for performance assessment such as virtual simulators and rubrics (criteria tables) for scientific research assessment.

Enclosed:

Annex 24.6. Declaration on Doctoral Degrees, LCS Experts – Applicable to the Doctoral Study Programmes.

Annex 24.7. Analysis of the Composition of the Teaching Staff.

### **3.4.2. Analysis and assessment of the changes to the composition of the teaching staff over the reporting period and their impact on the study quality.**

**Dentistry** is characterised by a severe shortage of teaching staff and researchers throughout Europe. Similarly, according to ADEE, around 10% of medical study programme alumni are considering an academic career, compared to only 5% of dental alumni. Work is being done with sub-specialty residents to motivate them for doctoral studies and to continue, albeit partially, an academic career. The Faculty of Dentistry has a large number of invited lecturers – 68. There are 61 elected positions. Part-time and invited lecturers are involved in the work to ensure the same quality of training across study courses. There is a strong effort to standardise and objectively assess examination methods. Invited lecturers are briefed on the specific requirements of specific courses and are motivated to attend the courses organised by the Centre for Educational Growth (CEG). Invited lecturers, working alongside experienced lecturers, can enhance their knowledge and gain experience that can be useful in private practice, as the cases analysed in the students' classes can be complex and atypical. The classes also provide the opportunity to discuss complex cases with medical specialists in the field.

Work is being done with medical residents and doctoral students to motivate them to choose an academic career. For PhD students, teaching students is a prerequisite. During their residency, young doctors are involved in teaching and conducting practical classes, thus stimulating their possible interest in an academic career. Teaching classes and seminars to residents and PhD students allows them to improve their clinical knowledge, as in many cases more complex clinical cases can be analysed.

RSU Institute of Stomatology offers better working conditions for academic staff. They also receive more funding from RSU Institute of Stomatology for both professional and educational travel. RSU Institute of Stomatology provides higher salaries for academic staff, and they have the possibility to adjust their working hours.

A strong emphasis is placed on attracting visiting lecturers from other countries to the study process. Visiting lecturers conduct both seminars and lectures.

The elected academic staff is characterised by low staff turnover, which means that the elected lecturers are experienced.

Summarising the information on teaching staff who **are RSU** alumni, it is concluded that 157 lecturers have graduated from RSU study programmes (from one to four), while 51 lecturers are currently (in the academic year 2021/2022) studying in one of the programmes.

From 1 January 2017 to 1 October 2022, 151 lecturers of the study programme “*Dentistry*” participated in continuing education activities of the Centre for Educational Growth attending more than 190 training activities of different content. In total, teaching staff of the study programme “*Dentistry*” spent 12,508 academic hours on continuing education activities.

The teaching staff participated in the following CEG activities: Creating Animated Visual Study Materials; Academic Integrity and Ethics in Higher Education; Remote Group Work for Students in Miro Tool; Collaboration and Partnership Towards Professional and Sectoral Development Local, National, Transnational; Contextualizing the use of Webinar in Higher Education; Creating Engaging and Interactive Classrooms through Active Learning Techniques; E-Studies up Close, or Simply and Quickly About the Complicated; The Potential of Conflict to Build Cooperation; Mediation – A Culture of Conscious and Responsible Conflict Resolution at the University; Qualitative Research Methods; Turnitin: How to Assess Students’ Papers in Higher Quality and More Effectively?; Potential of Immersive Technologies for Efficient Learning Strategies; Creating Interactive Content in the E-learning Environment (H5P); How Games Activate Teaching and Learning; How to Create Effective Image and Text Compositions in Learning Materials; Quantitative Research Methods and Statistical Data Processing in Health Care; Visualisation of Content in Presentations; Assessment Approaches and Types of Tests in Remote Studies and Many Others.

**3.4.3. Information on the number of the scientific publications of the academic staff members, involved in the implementation of doctoral study programme, as published during the reporting period by listing the most significant publications published in Scopus or WoS CC indexed journals. As for the social sciences, humanitarian sciences, and the science of art, the scientific publications published in ERIH+ indexed journals or peer-reviewed monographs may be additionally specified. Information on the teaching staff included in the database of experts of the Latvian Council of Science in the relevant field of science (total number, name of the lecturer, field of science in which the teaching staff has the status of an expert and expiration date of the Latvian Council of Science expert) (if applicable).**

Not applicable

**3.4.4. Information on the participation of the academic staff, involved in the implementation of the doctoral study programme, in scientific projects as project managers or prime contractors/ subproject managers/ leading researchers by specifying the name of the relevant project, as well as the source and the amount of the funding. Provide information on the reporting period (if applicable).**

Not applicable

**3.4.5. Assessment of the cooperation between the teaching staff members by specifying the mechanisms used to promote the cooperation and ensure the interrelation between the study programme and study courses/ modules. Specify also the proportion of the number of the students and the teaching staff within the study programme (at the moment of the submission of the Self-Assessment Report).**

The ratio of the number of students and teaching staff in the study programme: 488 students and 253 lecturers (information on students in Annex 16, on lecturers in Annex 24.7). The ratio of the number of students and teaching staff is 1.9.

The study programme provides a lecturer:student ratio of 1:8 for clinical study courses and a lecturer:student ratio of 1:8 to 1:16 for pre-clinical study courses.

There are several levels of cooperation between teaching staff members:

1. In department meetings to discuss and debate topical issues in specific courses.
2. In meetings of heads of departments to address interdepartmental cooperation issues.
3. In meetings of the Dean and the Vice-Dean of the Faculty with the heads of study courses to raise issues of mutual cooperation.
4. Mutual observation of teaching.

Student surveys are analysed on a regular basis, heads of study courses are invited to assess student opinions and provide feedback to students. Student opinion on the study course process and lecturers' contribution to the teaching of study content is analysed both at departmental meetings and at meetings of heads of departments.

The Dean and the Vice-Dean of the Faculty, as well as the mentor of international students, meet regularly with the study course leaders to seek the students' opinion on current issues related to the study courses.

Attending international events dedicated to dental education, such as the [ADEE Congress](#), as well as organising on-site educational courses, are also good opportunities to gain and share experience. Informal conversations are invaluable.

# Annexes

III - Description of the Study Programme - 3.1. Indicators Describing the Study Programme		
Sample of the diploma and its supplement to be issued for completing the study programme	24.1._Diploms_Zobarsts_eng.pdf	24.1._Diploms_Zobarstnieciba.pdf
For academic study programmes - Opinion of the Council of Higher Education in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions (if applicable)		
Compliance of the joint study programme with the provisions of the Law on Higher Education Institutions (table) (if applicable)		
Statistics on the students in the reporting period	16_Anx_Stud_statistics_Dentistry.pdf	16_pielik_Zobarstnieciba_statistika_lv.pdf
III - Description of the Study Programme - 3.2. The Content of Studies and Implementation Thereof		
Compliance with the study programme with the State Education Standard	17.1_pielik_2LPSP_atbilstiba_izglitibas_standartam.pdf	17.1_pielik_2LPSP_atbilstiba_izglitibas_standartam.pdf
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard or the requirements for professional qualification (if applicable)	18.2_Anx_Mapping_prof_standard_dentistry.pdf	18.2_pielik_StP_atbilstiba_profesiju_standartam_ar_starpliku_2var.pdf
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)	17.2_Anx_Compliance_with_Field-Specific_Regulations_Dentistry.pdf	17.2_pielik_Zobarstnieciba_Atbitstiba_nozares_specifikajam_regulejumam.pdf
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	18.1_Anx_Mapping_st_courses_achiev_learn_outcomes_dentistry.pdf	18.1_pielik_Stud_kursu_kartejums_lv.pdf
The curriculum of the study programme (for each type and form of the implementation of the study programme)	19_Anx_Plan_for_studies_Dentistry.pdf	19_pielik_StP_planojums_Zobarstnieciba.pdf
Descriptions of the study courses/ modules	20_Anx_Study_course_description_Dentistry.pdf	20_pielik_Kursu_apr_Zobarstnieciba.pdf
Description of the organisation of the internship of the students (if applicable)	09_Anx_Student_placement_Dentistry.pdf	9.1_pielik_ZF_prakses_norises_kartiba.pdf
III - Description of the Study Programme - 3.4. Teaching Staff		
Confirmation that the academic staff of the doctoral study programme includes not less than five doctors, of which at least three are experts approved by the Latvian Council of Science in the branch or sub-branch of science in which the study programme intends to award a scientific degree (if applicable)		
Confirmation that the academic staff of the academic study programme complies with the requirements specified in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions (if applicable)		



# Nutrition Studies (45722)

Study field	<i>Health Care</i>
ProcedureStudyProgram.Name	<i>Nutrition Studies</i>
Education classification code	<i>45722</i>
Type of the study programme	<i>Academic master study programme</i>
Name of the study programme director	<i>Lolita Vija</i>
Surname of the study programme director	<i>Neimane</i>
E-mail of the study programme director	<i>Lolita.Neimane@rsu.lv</i>
Title of the study programme director	<i>Ārsta grāds</i>
Phone of the study programme director	
Goal of the study programme	<i>Train qualified professionals in the field of nutrition who have acquired in-depth theoretical and methodological knowledge, research skills and are able to carry out scientific research independently in the field of nutrition, food, biochemistry, food chemistry and toxicology, who are able to analyse, critically evaluate and generate new ideas and alternative approaches in nutrition to promote public health and prevent nutrition-related diseases in order to achieve the goals of nutrition policy set by the World Health Organisation, the European Union and Latvia.</i>
Tasks of the study programme	<p><i>1. The task of the program with A-module courses is to give master's students the opportunity to acquire basic knowledge in nutrition science, food science, health science and theoretical and methodological knowledge in scientific research work.</i></p> <p><i>2. The task of the program with the elective courses of Part B is to give opportunities to master's students with different previously acquired knowledge to learn the necessary prerequisites (remedial courses in the 1st semester) in order to ensure the opportunity to fully learn the topics covered in the A modules (human physiology and nutrition, nutrition during a person's life, clinical nutrition science) basic courses, and courses that ensure a deeper learning of basic subjects, creating an understanding of the individual fields of science, their interrelationships in solving medical problems, which the master's student chooses according to professional interests and in connection with the chosen topic of the master's work.</i></p>

Results of the study programme	<p>1. Able to demonstrate in-depth theoretical knowledge and understanding in current issues of public health, healthcare and nutrition science and understands the multidisciplinary of nutrition science: the theoretical foundations and main insights of natural sciences, food sciences and health sciences, which are the basis for creative thinking and research in nutrition science;</p> <p>2. Knows data processing methods, terminology, possibilities of use in various studies. Knows the planning techniques of epidemiological studies, the functioning of the health care system, the sources of health data acquisition and the basic principles of various studies to be conducted;</p> <p>3. Able to independently, using theory, methods and problem-solving skills, conduct research work in nutrition science (collect scientific literature, process research results and questionnaire data, perform statistical data processing; analyze and interpret research results);</p> <p>4. Able to reasonably explain and discuss the topical issues of nutrition science with specialists and non-specialists, able to recommend a scientifically based balanced diet for different groups of people;</p> <p>5. Able to independently analyze and evaluate the latest trends in the field of health care, food production, and health and safety aspects of food, using the theoretical knowledge acquired in natural sciences;</p> <p>6. Conduct epidemiological and sociological studies, identify and assess risks related to nutrition and eating habits, analyze them and offer proposals for improving the situation;</p> <p>7. Able to independently promote the improvement of their competences; carry out innovations in the field of nutrition science; continue academic education in doctoral studies;</p> <p>8. Able to independently formulate, critically analyze complex scientific and professional nutritional science problems, justify and solve practical nutrition science issues and research problems related to nutrition and health, by integrating the knowledge of various scientific branches and sub-branches (natural sciences, food sciences, health sciences, sports sciences), with nutrition and physical activities, contributing to the development and creation of new knowledge and research methods, promoting the competitiveness of graduates of master's studies in the field of nutrition;</p> <p>9. Demonstrate understanding and responsibility for the potential impact of nutritional research results on the environment and society.</p>
Final examination upon the completion of the study programme	Master's Thesis

## Study programme forms

**Full time studies - 2 years - latvian**

Study type and form	<i>Full time studies</i>
Duration in full years	2
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	80
Admission requirements (in English)	<i>First level professional higher education in medicine or dentistry, food technology, veterinary medicine, Bachelor's or Master's degree in natural sciences, health sciences, pharmacy, food chemistry, food science, sports pedagogy, health education and other related fields; Entrance examination</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	<i>Master`s Degree of health Sciences in Nutrition</i>
Qualification to be obtained (in english)	-

**Places of implementation**

<b>Place name</b>	<b>City</b>	<b>Address</b>
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

### 3.1. Indicators Describing the Study Programme

**3.1.1. Description and analysis of changes in the parameters of the study programme made since the issuance of the previous accreditation form of the study field or issuance of the study programme license, if the study programme is not included on the accreditation form of the study field, including changes planned within the evaluation procedure of the study field evaluation procedure.**

Table 1. Changes in the StP Parameters

No.	Parameter	Description and analysis of changes in the StP parameters during the accreditation period	Planned changes within the assessment procedure
1.	Study direction	-	-
2.	Title of the StP	-	-
3.	Code according to the Latvian Education Classification	-	-
4.	Head of the StP	-	-
5.	Academic degree of the head of the StP	-	-
6.	Objective of the StP	The objective has not changed in essence, but the wording has been clarified.	-
7.	Tasks of the StP	Clarification of wording.	-
8.	Learning outcomes to be achieved	Clarification of wording.	-
9.	Final examination upon the completion of the StP	-	-

<b>No.</b>	<b>Parameter</b>	<b>Description and analysis of changes in the StP parameters during the accreditation period</b>	<b>Planned changes within the assessment procedure</b>
10.	Type and form of studies	-	-
11.	Duration of implementation	-	-
12.	Language of implementation	-	-
13.	Volume of the StP (CP)	-	-
14.	Admission requirements	From the academic year 2020/2021, admission takes place simultaneously at all three partner universities, with an additional admission requirement of an admission exam - interview.	-
15.	Degree to be awarded	-	-
16.	Qualification to be awarded	-	-
17.	Place of implementation	-	-

Table 1 clearly shows that since the previous accreditation sheet for the study direction was issued, no significant changes have been made to the parameters of the study program, but clarifications have been made. When organising working groups with the joint programme council, the study results in the study program and study course descriptions have been clarified, harmonizing them with the scope of the CP, an analysis (mapping) of the mutual compliance of the results of the study program and the study courses included in it has been carried out, as well as the content of the courses has been supplemented with the latest industry events. At the start of the new academic year in each study course, the lecturers update the list of literature sources and review the content of the entire study course, according to the current events of the field of nutrition science and

accordingly make the necessary additions to the materials of lectures and classes, placing them also in the e-study environment of the relevant partner university. During the accreditation period, the following changes have been made to the parameters of the joint master's study program "Nutrition Science": the wording of the study purpose, tasks and results has been clarified, the results of the Master's Degree have been reduced to 9, changes have been made to the admission requirements, and several planned changes have been made to improve the recognition of the study program. Clarifications were made in coordination with LU and LBTU, which is confirmed by the information published on the AIKA e-platform:

<https://eplatforma.aika.lv/index.php?r=site%2Fprogram%2Fview&id=1947>

<https://eplatforma.aika.lv/index.php?r=site%2Fprogram%2Fview&id=1900>

As an important clarification, it should also be mentioned that in 2022 the cooperation agreement was updated and signed by all partner universities.

**3.1.2. Analysis and assessment of the study programme compliance with the study field. Analysis of the interrelation between the code of the study programme, the degree, professional qualification/professional qualification requirements or the degree and professional qualification to be acquired, the aims, objectives, learning outcomes, and the admission requirements. Description of the duration and scope of the implementation of the study programme (including different options of the study programme implementation) and evaluation of its usefulness.**

Academic Master's study programme "Nutrition Studies" has been implemented at Rīga Stradiņš University since the academic year 2003/2004. The volume of the study programme is 80 credit points (120 ECTS) this is a completely suitable duration for learning the program's deliverables. 60 CP (90 ECTS) of the programme are constituted by theoretical study courses and 20 CP (30 ECTS) – writing a Master's thesis. "Nutrition Studies" is a full-time regular study programme, which is implemented over two years of studies or four semesters. As a result of graduation from the programme, alumni are awarded a degree of the Master's Degree of health Sciences in Nutrition (principal area of studies – nutrition studies). Academic Master's programme "Nutrition Studies" has been accredited several times during its lifetime for the full accreditation period (six years), with the last accreditation of the programme as part of the health care study direction in 2017. It is important to mention that the evaluation of the program took place in recent years as well, as the University of Latvia (accreditation deadline until 02.02.2029) and the Latvian University of Biosciences and Technologies (accreditation deadline until 05.10.2028) also had to pass it. During their activity, higher education institutions have been able to cooperate and make joint decisions regularly and with high quality, as well as accomplish important tasks.

The content of the courses included in the study programme is up-to-date and meets the needs of the field, the labour market and scientific trends. The content of the courses is continuously updated by university teaching staff, whose scientific research and academic work is related to the subject matter of the course, and by professionals in the field, who deal with issues related to the subject matter of the course on a day-to-day basis.

The achievement of the objective and learning outcomes of the StP is ensured by the implementation of the tasks set in the courses included in the programme, and students enrolled in the programme (with a wide range of prior education) are worthy of receiving diplomas of Master of Health Science in Nutrition Studies signed by the rectors of the three universities upon completion

of the programme. The joint study programme of the University of Latvia (LU), Latvia University of Life Sciences and Technologies (LBTU) and Rīga Stradiņš University is appropriately titled StP “Nutrition Studies”.

**Aim** of the study programme is to prepare qualified nutritionists with in-depth theoretical and methodological knowledge, research skills and ability to carry out independent scientific research within the areas of nutrition, food, biochemistry, food chemistry and toxicology, able to analyse, critically assess and generate new ideas and alternative approaches to nutrition studies to promote public health and to prevent nutrition-related diseases, and to implement the nutrition policy of the World Health Organisation (WHO), European Union (EU) and Latvia.

Nutrition studies are interdisciplinary, so the programme’s admission regulations include a much broader range of applicants than just alumni of the professional Bachelor’s study programme Nutrition. Admission to the study programme requires a first-cycle professional higher education in medicine or dentistry, food technology, veterinary medicine, a Bachelor’s or Master’s degree in natural sciences, health sciences, pharmacy, food chemistry, food science, sports pedagogy, health education or other related fields.

Applicants must pass an examination comprising a structured interview. The weighted average grade of the previous education diploma is taken into account and, in the event of equal grades, the certificates obtained by the applicants and the scientific publications and work experience in the field of nutrition science presented are taken into account.

Admission regulations fully comply with the interdisciplinary nature of nutrition studies. Previous experience of implementing the study programme (since 2005) shows that students possessing the preliminary knowledge stated in admission regulations are able to integrate well into the study process.

Study programme “Nutrition Studies” was developed on the basis of an analysis of international study programmes in nutrition studies. The specifics of the programme, in comparison with foreign study programmes, is the relevance of its theoretical foundations and reasoning to the specific problems and situation in Latvia. The Latvian programme has been strategically created as an integrated study programme, covering physiological, biochemical aspects, the latest achievements of clinical nutrition studies, interaction between medical science and food science, food and nutrition policy, food and food production safety. Completing the programme provides knowledge of activity of the human body on cellular, tissue, and organ level, gives an understanding of the biochemical processes in a human body, changes in the body in case of a disease, the factors influencing human health and possibilities to prevent them.

Study programme “Nutrition Studies” is a unique and the only academic Master’s study programme in nutrition studies in Latvia, which provides continuing education opportunities in the Master’s study programme in nutrition studies for specialists with higher professional education in medicine or dentistry, Bachelor’s or Master’s degree in biology, chemistry, environmental sciences, health sciences, nursing, public health, health care, physiotherapy, etc., as well as pharmacy, biochemistry, food technology, sports pedagogy, and other related fields. The StP prepares competitive specialists for public health development. These specialists are familiar with the theory of nutrition studies and are able to apply it in scientific research and in the practical solution of nutrition issues in accordance with the EU, WHO and Latvian strategic trends; they are able to independently formulate and critically analyse scientific and professional problems in nutrition science. The most important aspect is that the mission of StP “Nutrition Science” is to promote the development and sustainability of the nutrition science industry in Latvia, nutrition policy and nutrition science are inextricably linked with health care and the field of health care studies. In the first decade after regaining independence, nutrition science in Latvia had a stagnant character,

practically no significant research was conducted in the field of nutrition, and young nutritionists were also not educated. However, as the opportunity to get acquainted with research in the world, using Internet clinical databases grew, it became completely clear that nutrition science should be continued and developed in Latvia as well. This is especially important because, according to the World Health Organization, 7 of the 10 main causes of death in the world in 2019 were chronic non-communicable diseases, while a healthy diet is very important in the prevention of these diseases, such as cardiovascular and oncological diseases, 2. type diabetes, etc. From all of the above, it can be concluded that StP Nutrition Science harmoniously fits into the direction of healthcare.

Analysing and evaluating the interrelationship of study program aims and tasks, study results, as well as admission requirements, it can be concluded that they are visible and understandable and are interconnected. On the other hand, the program name (Nutrition Science), code (45722) and the degree to be obtained (Master of Health Sciences degree in Nutrition; professional qualification is not awarded) follow from the study program's achievable study results. Regarding the degree to be obtained, it can be appreciated that during changing regulatory framework, the program has managed to keep the name of the degree corresponding to the nature of the program. The wording of the degree results from the thematic field "Health Care" defined in MK 322, the program group "Medical services", which was opened as "Health care services" in Annex 4 of MK 322, the educational programme being allocated as one of the positions "Nutrition Science". As it is the most appropriate designation for the program outcomes, in this case it is the most appropriate degree title in the academic program.

### **3.1.3. Economic and/ or social substantiation of the study programme, analysis of graduates' employment.**

The first 30 students started their studies in the 1st semester of the academic year 2006/2007 in full-time regular study programme "Nutrition Studies". In the academic year 2013/2014, the 8th group of students started their studies. To date, 363 Masters have graduated from the programme. According to Paragraph 4.1 of the Inter-University Cooperation Agreement, the cooperation universities (RSU, LBTU, LU) each enrol 10 students by concluding a study agreement. Student enrolment takes place in accordance with the enrolment regulations.

Study programme "Nutrition Studies" is a unique study programme in Latvia; it has enabled Master's students to develop 346 Master's theses, participate in the implementation of EU co-funded projects, prepare three international conferences Nutrition and Health with the participation of foreign scientists: with 80 reports in 2012, 99 reports on 250 author studies in 2016 and 92 reports on 252 author studies in 2020, of which around 40% were from students, doctoral students and Master's students of our programme. The final result of these conferences: scientific articles in the Proceedings of the Latvian Academy of Sciences, section B. They have been published from 2013 to 2018 in five special issues of the Proceedings of the Latvian Academy of Sciences on the conference topic; thus, the research results have been circulated internationally, as the articles are available in the SCOPUS and Web of Science databases. In view of the above, it is reasonable to consider that the achievement of the objective and learning outcomes of the StP is ensured by the implementation of the tasks set in the courses included in the programme, that the students enrolled in the programme (with a wide range of prior education) are worthy of receiving diplomas of Master of Health Science in Nutrition Studies signed by the rectors of the three universities upon completion of the programme, that the joint (RSU, LU, LTBU) study programme has an appropriate title – Nutrition Studies.



There are 10 state-funded study places in the full-time form of the StP. The number of students applying to study is consistently high. In the last three years, 2020, 2021 and 2022, the admissions received 32, 36 and 24 applications respectively.

Looking over a longer period of time and examining the contribution and assessment of the StP as reflected in the alumni survey questionnaires, it can be seen that 40 alumni participated (50 questionnaires were sent out) in the survey in the academic year 2014/2015. Alumni were asked about their involvement in nutrition science after graduation. The replies were as follows: 22 of the respondents (51%) deal with food and nutrition issues on a daily basis, 22 (51%) are involved in raising public awareness on nutrition issues, four are developing nutrition legislation, six are involved in education, etc. After graduation, the masters highly evaluated the content of the study programme (35), the professionalism of the teaching staff (38), technical resources of the programme and wished the programme success in the future. At the same time, alumni noted that new educational materials in nutrition science, information and updating of knowledge would be useful. To implement the things alumni mentioned, the implementers of joint Master's study programme have organised international scientific conferences Nutrition and Health in 2016 and 2020, which featured lectures by specialists in nutrition science and nutrition policy, and lectures by leading European nutrition researchers/scientists. Professional organisations (Latvian Association of Diet and Nutrition Specialists) have also initiated organisation of informative seminars.

In the academic year 2015/2016, 19 alumni from different years completed a survey questionnaire evaluating the study process and the programme. Alumni noted that their education had contributed to their career development and professional fulfilment. Students noted the uniqueness of the programme, the research-based study process, and the team of professionals in the field implementing the study process.

It is gratifying to hear alumni say that the programme has given them not only in-depth knowledge and understanding, but also the opportunity to put it all to good use in their daily work. The study programme allows to participate in the drafting of laws and regulations. Studies gave the ability to search, to think, to analyse, to explore, to find solutions. The advantage and uniqueness of this programme lies in the opportunity to study at three Latvian universities at the same time. Three benefits are highlighted from the knowledge and skills acquired during the studies:

- 1) a broader vision of problems;
- 2) seeing causal links;
- 3) critical analysis of information.

In the academic year 2016/2017, 10 alumni provided feedback on the study programme. In terms of alumni satisfaction with the things learnt in the programme, 30% of graduates were very satisfied, 50% were satisfied and 29% were almost satisfied. When analysing the responses of LBTU, RSU and LU alumni, they are distributed proportionally, i.e. around 33% of graduates work in the field of nutrition, around 33% continue their work and 33% continue their studies at a higher level. The alumni survey clearly demonstrates the achievement of the outcomes to be achieved of the programme.

Based on the views of the alumni and the shortcomings identified, measures have been taken to improve the quality of the programme:

- new study materials and books have been acquired;
- international scientific conferences Nutrition and Health were organised in 2016 and 2020, which featured lectures by specialists in nutrition science and nutrition policy;
- a survey of employers was conducted.

Employers representing the Department of Public Health of the Ministry of Health, the management of the Latvian Centre for Disease Prevention and Control, employers from the private sector, heads of scientific institutions were surveyed about the knowledge, skills and competences of the programme alumni. The prevailing opinion was that alumni successfully fit in the work environment, deal with everyday situations related to nutrition issues, and their performance in the development of public health policy, guidelines and recommendations is of great importance.

Summing up the opinions of employers, measures were taken to improve the quality of the programme: the involvement of specialists of the field in the implementation of the study programme, more targeted involvement of students in research.

A summary of the surveys carried out (especially of employers and alumni) shows that the programme provides a broader perspective on problems, enables to see causal links, to critically analyse information on nutrition and public health issues.

Employers are involved both in the Quality Council of the Nutrition Studies study programme and in the national examination board, thus feedback is obtained annually through discussions regarding the job duties of Master's students and the competences they need, evaluating study programmes, the quality of individual study courses and the necessary changes in content. In general, employers appreciate the inclusion of Master's students in the labour market. Their main findings are that alumni have good theoretical and practical preparedness for work, that graduates are motivated, that they have good self-learning skills and new knowledge learning skills, they fit well into the team, quickly learn the specifics of work required for the position, take responsibility, and have good proficiency in foreign languages.

Employers note that several employees have started their professional careers as bachelors and, in parallel with their work, continue their Master's studies, that work experience improves performance quality.

In accordance with the procedure defined by RSU Process Description No. 22 Surveys (see Annex No. 1), all students complete a study course evaluation questionnaire for each study course in the e-studies, where they can express their opinion and proposals both regarding the content of the study course and its implementation methods, competences and work style of lecturers. Upon completion of studies, they evaluate the study programme in general by completing a survey questionnaire.

In general, the individual responsiveness of students to the centralised evaluation of individual courses and the programme has been low year after year, because students of the joint study programme are surveyed outside the RSU surveying facilities, using the questionnaire discussed by the Council of Master's study programme "Nutrition Studies". A survey questionnaire is prepared to analyse the implementation of the study courses of each semester. Each survey questionnaire includes questions on the assessment of the work of teaching staff, the assessment of the course content, the relevance of the form of knowledge testing and tests to the things learnt in the course, the assessment and usefulness of independent study work, objections and criticism, including the implementation of the remote study process in the academic year 2019/2020. The summary presents the results of the survey in the academic years 2013/2014, 2016/2017 and 2019/2020.

Analysing the content, performance of and things learnt in the 1st semester study courses, students have noted that they highly appreciate the implementation of the study courses Human Anatomy, Food Chemistry, Regulation of Physiological Processes in the Human Body, noting the teaching style of the courses, the methods practiced, including laboratory work at the Institute of Food Safety, Animal Health and Environment BIOR. Students noted that the love of the study course implementers for the work they do and their willingness to share their knowledge is clear.

When analysing the implementation of the 2nd semester courses, students noted the well-structured course planning and implementation, with particular praise for the implementation of the courses Food Intolerances and Allergies, Nutrition and Exercise, Basic Principles of Nutrition in Women at Different Stages of Life, Food Technology, Metabolic Syndrome and Eating Disorders. The practical work that helped to master the courses, the involvement of professionals in the study process, the work in the clinic, etc. were also positively assessed.

When analysing the 3rd semester courses, students felt that the 3rd semester courses were very interesting, relevant, but too intensive. On the positive side, some courses (Medical Nutrition in the Treatment of Chronic Diseases, Practical Aspects of Nutritional Therapy) provided opportunities to visit clinics, analyse patients' diets and study and analyse menus. When asked about the shortcomings and weaknesses of the programme, students noted the following:

- high volume of independent work, students want teaching staff to discuss the results of interim examinations in an effort to identify mistakes, there are objections against teaching staff of certain courses (analysis of the 1st semester work);
- there is no single e-environment of studies, each university has a separate one (analysis of the 2nd semester);
- the nutrition aspect was missing from some study courses, and there was a lack of practical classes in Biological Statistics (3rd semester).

In an attempt to find out students' opinions on the quality of implementation of remote studies, difficulties during the Covid-19 pandemic, the following was found out:

- the joint programme implementers have successfully tackled the challenges of implementing remote studies, with each university offering its own e-platform (Zoom, Microsoft Teams, BigBlueButton);
- greater psychological burden, requires greater self-discipline and self-motivation for studies;
- by implementing the programme this way, it is possible to fully master the study courses;
- the loss of practical classes, especially in the clinics, hindered a more complete mastering of the course;
- one of the key messages is that there will be future demand for this form of studies.

Summarising the students' opinions and the shortcomings they pointed out, the following measures have been taken to improve the quality of the programme:

- alumni of the study programme are involved in the implementation of some study courses;
- a change of lecturers in the courses Nutrition Policy and Nutrition Studies and Human Biochemistry and Molecular Biology.

#### **3.1.4. Statistical data on the students of the respective study programme, the dynamics of the number of the students, and the factors affecting the changes to the number of the students. The analysis shall be broken down into different study forms, types, and languages.**

The first 30 students of the StP started their studies in the 1st semester of the academic year 2006/2007 in form of full-time regular studies at all three partner universities, and a total of 346 Masters have graduated from the programme.

In the academic year 2022/2023, RSU has a total of 41 students in the 1st and 2nd years of studies.

According to Paragraph 4.1 of the Inter-University Cooperation Agreement, the cooperation universities (RSU, LU, LBTU) each enrol 10 students by concluding a study agreement. Student enrolment takes place in accordance with the enrolment regulations. The number of enrolled students has remained similar every year.

In general, in all three universities in the academic year 2022/2023, 41 students study in the 1st and 2nd year.

It should be noted that the number of students who were exmatriculated increased during the Covid-19 years.

The main reasons for the decrease in the number of students in general are:

1. The number of students who stop their studies in the first semesters is increasing, due to ill-considered choice of program or study direction, also due to life and work conditions;
2. Individual students are unable to continue their studies due to financial considerations or due to inconsistency between work and study schedules;
3. Masters students are unable to combine work with studies;
4. Some students continue their studies by taking an academic year off (due to illness, decree or other reasons), but not all return after the academic leave.

Enclosed:

Annex 16. Statistical Data on Students.

### **3.1.5. Substantiation of the development of the joint study programme and description and evaluation of the choice of partner universities, including information on the development and implementation of the joint study programme (if applicable).**

The StP was developed between 2004 and 2006 by teaching staff from three universities in collaboration with professionals of the field: Latvia's experience of the 1950s-1960s in addressing nutrition and health issues was absorbed and the current situation was explored; the experience of foreign universities and the material, technical and intellectual capacities of Latvian universities were evaluated, resulting in the development of an interdisciplinary study programme, which includes study courses for the development of public health that provide the opportunity to train competitive specialists who are familiar with the theory of nutrition science and are able to apply it in scientific research and practical solutions to nutrition issues in accordance with the main strategic trends of the EU, WHO and Latvia, which state that one of the cornerstones of the country's development is a healthy and functional human being, that good public health is an essential condition for building a stable and safe society, that it is necessary to reduce morbidity and mortality from non-communicable diseases, reducing the negative effects of risk factors on human health, that good health should be promoted and disease prevention should be ensured.

It should be noted that each of the cooperating higher education institutions has its own strengths or specialization orientations, that is, the Latvian University of Biosciences and Technologies has study courses directly related to food production, food quality evaluation, food marketing, evaluation of organic agricultural products, etc.

The University of Latvia offers study courses related both to health care, as well as specific chemistry courses, such as food chemistry courses, evaluation of the nutritional value of food products, etc.

The study courses implemented by Riga Stradiņš University are most directly related to health care, including aspects of nutritional therapy, the importance of nutrition at different stages of life, during various physical activities, as well as in the prevention of diseases.

Taking into account all of the above, it can be concluded that the cooperation of the three partner universities provides a maximum contribution in order to successfully implement the study results set for the "Nutrition Science" study programme.

## **3.2. The Content of Studies and Implementation Thereof**

**3.2.1. Analysis of the content of the study programme. Assessment of the interrelation between the information included in the study courses/ modules, the intended learning outcomes, the set aims and other indicators with the aims of the study course/ module and the aims and intended outcomes of the study programme. Assessment of the relevance of the content of the study courses/ modules and compliance with the needs of the relevant industry, labour market and with the trends in science on how and whether the content of the study courses/ modules is updated in line with the development trends of the relevant industry, labour market, and science.**

The content of the StP courses includes the topics, the learning of which is carried out in accordance with the study plan for the full-time form of studies, implementing the tasks set for the courses, ensuring the achievement of the objectives set for the course and the planned learning outcomes. The breakdown of the study courses included in the programme is as follows: Part A courses (which enable Master's students to acquire basic knowledge in nutrition science, food science, health science and theoretical and methodological knowledge in scientific research work), Part B courses (elective courses which enable Master's students with different prior knowledge to acquire the necessary preliminary knowledge for Part A courses, and courses which provide more in-depth study of the core subjects), as well as Part C courses. A logical learning sequence is provided for learning the courses included in the programme in accordance with the plan of classes. For example, the Theoretical Foundations of Food Chemistry course provides the knowledge and understanding necessary to master the topics covered in the Food Chemistry course, while the knowledge and skills acquired in the Food Chemistry course are necessary to master the courses Human Biochemistry and Molecular Biology and Regulation of Physiological Functions in the Human Body, the knowledge and understanding in the Human Anatomy course are essential for successful completion of medical and health care courses.

Students study study courses in all three universities, during four semesters students have a unique opportunity to study in many places of study, e.g.:

- RSU central building in Riga, Dzirciema street 16;
- Medical Education Technology Center in Riga, Anninmuiža Boulevard 26a;
- LU Nature house in Riga, Jelgavas street 1;
- LU Science house in Riga, Jelgavas street 3;

- LLU Faculty of Food Technology in Jelgava, Rīgas street 22;
- Paula Stradiņš Clinical University Hospital in Riga, Pilsoņu Street 13;
- Children's Clinical University Hospital shed in Gaiļezers, Riga, Juglas Street 20;
- Gerontology Center of Riga Eastern Clinical University Hospital *Biķernieki*, Riga, Lielvārdes Street 69;
- Riga Maternity Hospital in Riga, Miera Street 45;
- Scientific Institute of Food Safety, Animal Health and Environment BIOR.

Studies also take place in the following scientific research institutes: LU Institute of Microbiology and Biotechnology, LU Institute of Experimental and Clinical Medicine, Institute of Organic Synthesis, LU Institute of Marketing and Quality Management, Latvian Food and Veterinary Service, Health Policy Planning Department of the Ministry of Health.

The practical application of the acquired knowledge is reinforced in course units such as laboratory work (e.g. in courses Nutritional Value of Foods, Regulation of Physiological Functions in the Human Body, etc.), practical sessions in the clinic (e.g. in course Medical Nutrition in Case of Acute Diseases, Medical Nutrition in Case of Chronic Diseases, Practical Aspects of Nutritional Therapy, etc.), and the theoretical knowledge and insights acquired are consolidated in practice through the students' course papers and Master's theses and their daily work (around 50% of students) in health care. All this ensures the implementation of the StP objective and tasks and the achievement of the learning outcomes, and provides students with knowledge and understanding, skills and competences in nutrition science in accordance with level 7 of the Latvian Qualifications Framework, as evidenced by the 346 Master's theses developed and defended during the 14 years of implementation of the StP.

Students and lecturers have ample opportunities to use the resources of the libraries of all three cooperating universities. The [PEN nutrition database](#) can be mentioned as particularly useful in the field of nutrition.

This database is very widely used both by university educators and students as a learning tool in critical evaluation and evidence-based decision-making in nutrition science, and by policy makers as an evidence-based reference for guiding nutrition policy development.

Based on the above, it can be said that the content of the study courses is relevant and meets the needs of both the industry and the labour market, as well as scientific trends.

In general, it can be said that during the studies, students acquire in-depth theoretical and methodological knowledge, research skills and, at the end of the studies, are able to independently carry out scientific research work in the field of nutrition science, food and health, are able to analyse, critically evaluate and generate new ideas and alternative approaches in nutrition science for public health promotion and prevention of nutrition-related diseases in order to realize the goals of the World Health Organization, the European Union and Latvia's nutrition policy.

RSU sets priorities and also foresees cooperation with universities of a similar study and research direction in the EU and other countries, whose field and direction correspond to this study direction or the direction of the food field.

In 2023, a productive collaboration with the University of Iceland of the project "Staff mobility between Rīga Stradiņš University and University of Iceland to establish scientific collaboration in the nutrition field" was launched.

The implementation and provision of StP is strictly guided by the new, renewed cooperation agreement between universities, see Annex 24.2.1.

**3.2.2. In the case of master's and doctoral study programmes, specify and provide the justification as to whether the degrees are awarded in view of the developments and findings in the field of science or artistic creation. In the case of a doctoral study programme, provide a description of the main research roadmaps and the impact of the study programme on research and other education levels (if applicable).**

The objective and mission of the StP is to train nutrition science specialists who have acquired in-depth theoretical and methodological knowledge, research skills and are able to independently carry out scientific research in the field of nutrition science, contribute to the creation of new knowledge, engage in the development and implementation of health education programmes, participate in the development and implementation of national food, nutrition and health policy, contributing to the Latvian society and economy. To ensure research-based and innovative studies that contribute to the development of public health and well-being, both students and university teaching staff involved in the study process share their competence with the public (e.g., participate in Researchers' Nights – 2018, 2019; collaborate with specialists from other branches of science in conferences and research).

The objective of nutrition science is fully in line with other fields of science in Latvia and with the common objectives and established development directions of health care: to promote and develop scientific capacity; to prepare and implement collaborative research projects for the teaching staff of universities (RSU, LU, LTBU) involved in the programme implementation in collaboration with scientists of Latvian research institutes and scientists practicing in clinics; to organise international conferences (in 2012, 2016, 2020 – international conference Nutrition and Health), to prepare publications to be included in, for example, Web of Science, SCOPUS database, etc.; to promote knowledge transfer and creation of new intellectual values for their use in the development of public health and well-being; to engage in international scientific networking; to promote continuing education of the StP alumni in doctoral studies to ensure renewal of scientific and academic staff in nutrition science.

The research areas of the academic staff involved in the implementation of the study programme are related to the topics of the courses they teach. The academic staff involved in the study programme participates in the basic and applied research projects of the Latvian Council of Science (LCS), projects co-financed by the Ministry of Education and Science (MoES), the European Social Fund (ESF), European Regional Development Fund (ERDF), European Economic Area (EEA) and Norwegian Financial Mechanism research programmes, National Research Programme projects, projects under contracts with entrepreneurs, Framework Programme 7 (FP7) projects, Erasmus+ projects and university (RSU, LU, LTBU) research projects, etc. In the last reporting period, academic staff participated in 93 projects, prepared 230 publications and 370 conference presentations on their research.

**3.2.3. Assessment of the study programme including the study course/ module implementation methods by indicating what the methods are, and how they contribute to the achievement of the learning outcomes of the study courses and the aims of the study programme. In the case of a joint study programme, or in case the study programme is implemented in a foreign language or in the form of distance learning, describe in detail the methods used to deliver such a study programme. Provide an explanation of how the student-centred principles are taken into account in the implementation of the study process.**

According to the RSU internal regulations, from 2018 to 2020, the study plan of StP “Nutrition Studies” and the study course descriptions included in the study programme were updated (adaptation of the form and content of study course descriptions to the uniform requirements set by the university) in order to promote a student-centred study process with high-quality teaching and learning, which includes innovative teaching methods, supportive and inspiring study environment and individual approach; ensuring a study process based on learning outcomes with content corresponding to the objective of the study process and planned learning outcomes, its structure and interactivity of the study process, choosing appropriate teaching methods and assessment of the content of the students’ teaching.

Learning and teaching innovations are viewed from two perspectives: firstly, methodological innovations, i.e., in research, work environment, research, projects, problem situations, etc. promotion of studies based on approaches and methods; secondly, technological innovations – H5P, Miro, Turnitin QuickMark, 3D printers, augmented and virtual reality, etc. using solutions for developing a technology-enriched study process.

Since the previous accreditation, the study direction has developed modern and particularly important methods of study and pedagogy and interactive ways of distance studies, for example, Zoom, MST, Facetime broadcasts, YouTube broadcasts and recordings, online broadcasts of research conferences and the use of clip recordings for studies. The methodology of simulation technologies has gained a very important role in the study process and, accordingly, rapid development: simulations of manipulations, simulations of clinical processes, simulations of processes. For this purpose, additional financial investments have been made both in various departments of the study direction and in the Medical Education Technology Center (MITC). The methodology of various simulations can be found in practically all study direction programs.

In addition, lecturers learn innovative study methodologies at the Centre for Pedagogical Development, during internships at many universities around the world, during exchange visits and other forms of international cooperation.

The formulation of study course outcomes takes into account the objective, tasks and outcomes of the study programme (the knowledge, skills and competences acquired in the course – what the student is able to do after studying the course). The course outcomes are verifiable, understandable and concrete. A mapping of learning outcomes is carried out to make sure and ensure that the learning outcomes formulated in the study courses and the study programme are interrelated and achievable. The mapping of learning outcomes shows that the study courses fit in the study programme and ensure the achievement of the study programme objectives, allow to make sure that the learning outcomes are achieved in a progressive and logical manner, that the outcomes to be achieved are interrelated, and that they are consistent with the study programme objectives and outcomes.

To achieve the learning outcomes (course learning) various teaching and learning methods are used: lectures, seminars, independent work (studying and analysing scientific literature), presentations of scientific literature analyses, reports, student discussions during seminars, exchange of experience and discussions between students, as the students enrolled in the programme have acquired knowledge in various Bachelor of Health Care programmes prior to their studies in the StP.

The completion of the study courses is evaluated on a 10-point scale according to the following criteria: the amount and quality of the acquired knowledge, the acquired skills, the acquired competences in accordance with the planned learning outcomes. A course is considered to have



been successfully completed if the grade (as determined according to the learning outcome criteria corresponding to the learning outcomes formulated in the course) is not lower than “4” (almost satisfactory).

There are two types of examination in the study courses: interim examinations (test work, practical work, preparation and presentation of reports, etc., according to the course specifics) with a total assessment of not less than 50% of the total assessment; the final examination of the course – an exam with an assessment of not less than 10% of the total assessment is carried out either in writing or orally.

The principles specified in the Regulation of the Cabinet of Ministers of the Republic of Latvia of 13 May 2014 No 240 Regulations on the National Standard of Academic Education: the principle of openness, the principle of revision of assessment, the principle of mandatory assessment, the principle of variety in the type of examination and the principle of relevance are observed in the assessment of study results. The development, defence and evaluation of course papers and Master's thesis provided for in the study plan of the Nutrition Studies programme are carried out in accordance with the basic criteria of the document of Rīga Stradiņš University Regulations on Development and Defence of Qualification Thesis, Student Research Paper, Bachelor's Thesis and Master's Thesis (see RSU Senate Meeting Minutes No. 2-S-1/2/2022 of 22 February 2022), which have been agreed with the partner universities LBTU and LU.

In order to promote the individual performance of students and evaluate the level of the achieved study results, both summative and formative evaluation are used in the study process. In the context of the study results, both the study course and the general knowledge, skills and attitudes are essential, therefore the students' active involvement and participation, initiative and assumption of responsibility are additionally evaluated.

Implementation of the study programme and ensuring the quality of the study process have been set as one of the most important tasks of both academic and ancillary staff of the StP. Study process quality assurance involves first of all activities related to raising qualification of the academic staff and involvement in the scientific research work.

Secondly, tools such as following the achievements of students and personal contact between students and the academic staff involved in implementation of the study programme are used for quality assurance purposes. An important element of study process quality is hearing out the student's opinion both during meetings, consulting Master's students, and cooperating during the writing of course papers of Master's thesis.

Thirdly, students' opinions on the study programme as a whole and on specific lecturers are obtained through regular questionnaires, as well as by analysing the results obtained and discussing them with Master's students and getting their thoughts on lecturers. The opinions of experts, employers and study programme alumni are also analysed in assessment of the study process. Quality assurance in the study programme is also guaranteed in regular meetings and discussions of academic staff in the Quality Council of study programme “Nutrition Studies”. In order to monitor the quality assurance of the study environment, a study program self-evaluation report is prepared once a year, which includes information on changes in study plans and courses, the creation of new study courses, study materials and information resources, cooperation with interested parties, changes in infrastructure, etc. An important part of the quality of studies is the provision of study materials, textbooks and resources, so the RSU library fund is continuously replenished with literature recommended by the teaching staff in the national language and foreign languages (mainly English). The lecturers themselves also prepare study materials, write textbooks and monographs, which are used in the study process. The management of the faculty continuously monitors the compliance of the study environment and material and technical provision with the

needs of the study process. According to the results of the quality monitoring measures, the quality of studies is reviewed and improvement measures are taken.

**3.2.4. If the study programme envisages an internship, describe the internship opportunities offered to students, provision and work organization, including whether the higher education institution/ college helps students to find an internship place. If the study programme is implemented in a foreign language, provide information on how internship opportunities are provided in a foreign language, including for foreign students. To provide analysis and evaluation of the connection of the tasks set for students during the internship included in the study programme with the learning outcomes of the study programme (if applicable).**

**3.2.5. Evaluation and description of the promotion opportunities and the promotion process provided to the students of the doctoral study programme (if applicable).**

**3.2.6. Analysis and assessment of the topics of the final theses of the students, their relevance in the respective field, including the labour market, and the marks of the final theses.**

In the reporting period 2017-2022, Master's students have addressed problems covering a wide range of issues in nutrition science in their final theses. The thesis topics are diverse, out of 157 Master's theses developed:

- 48 theses (31%) deal with Nutrition as a Risk Factor for Chronic and Acute Diseases, Nutritional Therapy (e.g. Metabolic Syndrome in Medical Staff; Connection of Metabolic Syndrome with Sleep Duration, Recognition of Malnutrition and Treatment Tactics in Primary Care, Possible Nutrient Deficiencies and Anthropometric Changes in Children with Food Allergies);
- 28 theses (18%) deal with Ensuring a Nutritious Diet for the Population, Nutrition and Eating Habits (e.g. Vegan Dietary Habits and Bone Density, Malnutrition Risk Assessment for Elderly People in Home Care, Increased Body Mass Index and Pregnancy, Effect of Apple Fibre on Lipid Profiles in People Over 60, Assessment of Eating Habits in Children Aged 6-12 Years and Their Relationship to Dental Caries and Bone Density);
- 22 theses (14%) are devoted to the topic of Evaluation of Nutritional Value and Bioactive Compounds in Food and Its Raw Materials (e.g. Evaluation of Fibres in Wheat and Rye Wholemeal Bread, Dairy Products in the Diet of Pregnant Women in Latvia, Nutritional Evaluation of Processed Products of Chaenomeles, Evaluation of the Effect of Nitrates on Antioxidant Content of Lettuce);
- 19 theses (12%) are on Nutrition and Exercise, Nutrition of Athletes (e.g. Dietary Habits and Insulin Resistance in 9-10 Year Old Children, Nutritional Assessment of Cheerleaders During

Training and Performance, Exercise Capacity and Metabolism During High-Intensity Training, Assessment of Dietary Habits, Physical Activity and Resting Metabolic Rate in a Young Population, Nutritional Assessment in Bodybuilders During Preparation and Pre-competition, Effects of Protein and Fat Diets in Professional Half Marathon and Marathon Runners Before Competition);

- 16 theses (10%) are on Novel and Functional Foods, Food Development for Specific Consumer Groups (e.g. Use of Galacto-Oligosaccharides in Bread Production, Vitamin D3 Fortified Dairy Products in the Diet, Research on Galacto-Oligosaccharides, Research on Probiotic Nutrients);
- 11 theses (9%) are on Public Health and Nutrition Policy (e.g. Impact of School Education Programmes on Fruit and Vegetable Consumption, Adding to the Photo Atlas of Foods and Food Portions and Evaluating the Resulting Photos, Effectiveness of the Weight Correction Programme at the Children's Clinical University Hospital, Salt Consumption in the Diet of People in Latvia and Factors Influencing It);
- 7 theses (4.5%) are devoted to the topic of Dietary Supplements (e.g. Assessment of Knowledge, Attitudes and Practices of Pharmacy Pharmacists and Consultants on Dietary Supplements, Dietary Supplement Use Trends Among Latvian Athletes);
- 6 theses (4%) are on Contamination of Food and Its Raw Materials (e.g. Food Dyes Associated with Pseudoallergic Reactions, Their Use in Food Products, Occurrence of Aminoglycoside Class Antibiotics in Honey Available in Latvia).

The Master's theses developed by the Master's students gave the final examination board confidence that the courses included in the programme provide an opportunity to prepare qualified nutrition science specialists whose knowledge, skills and competences meet the requirements of Level 7 of the Latvian Qualifications Framework, that the Master's students have good knowledge of the theory of nutrition science and are able to apply it in scientific research and in the practical solution of nutrition issues in accordance with the main strategic trends of Latvia, which state that it is necessary to reduce morbidity and mortality from non-communicable diseases by reducing the negative impact of risk factors on human health, that good health should be promoted and disease prevention should be ensured.

The specifics of the programme, in comparison with foreign study programmes, is the relevance of its theoretical foundations and reasoning to the specific problems and situation in Latvia. The acquired knowledge, skills and competences provide the following opportunities after graduation: to participate in the development and implementation of health education programmes; to participate in the development and implementation of national food, nutrition and health policies; to develop new and healthy food products in food production companies; to carry out scientific research activities in the field of nutrition science; to study in a doctoral study programme. This is due to the way the study process is organised: the programme involves lecturers and scientists from different branches of science and universities; interdisciplinary research is possible, for example in health care (medicine), food science or natural sciences.

Information on topics and grades of master's theses is available in Annex 22.

### **3.3. Resources and Provision of the Study Programme**

#### **3.3.1. Assessment of the compliance of the resources and provision (study provision, scientific support (if applicable), informative provision (including libraries), material and**

**technical provision, and financial provision) with the conditions for the implementation of the study programme and the learning outcomes to be achieved by providing the respective examples.**

StP “Nutrition Studies” is implemented in all cooperation universities (RSU, LU, LTBU), using the material and technical resources of the universities involved in the programme (auditoriums and laboratories with existing equipment) in accordance with the study plan and the Cooperation Agreement of the joint study programme (Annex No. 24.2.1.).

The RSU library is an accredited library of national importance and is one of the core RSU structural units that provides study and research activities with the necessary information resources, as well as a wide range of services. The information resources needed for studies are updated every year. The purchase of internationally recognised teaching materials in English is significantly increased. The improvement of the range of e-books, which makes it possible for everyone to partially replace paper books, plays an important role. Interlibrary subscription (including international) services are available to students. Availability of RSU e-resources is the same in all structural units of the library, while most of the latest books in the field of rehabilitation are available at the METC branch of the library, where most of the study programme courses are delivered. Over the past five years, the RSU library has acquired 338 books on nutrition and diet therapy (worth around €5,400).PEN: Practice-based Evidence in Nutrition database is subscribed to annually (£1,615 per year).

A search on the topic of Nutrition in the subscribed multidisciplinary databases indicates 730 e-books (Ebook Central (ProQuest)) and 2,122 e-books (EBSCO eBook Academic Collection). Primo unified search engine lists around 100 e-journal titles under Nutrition and Dietetics.

In 2022, the library reviewed the bibliography and literature provision of the StP “Nutrition Studies” courses and concluded that it was generally very good.

RSU common resources are described in the description of the direction, so this section focuses on the material and technical base of the cooperation universities.

**Material and technical resources of LU.** Three faculties of LU are involved in the implementation of the StP: Faculty of Biology (FB), Faculty of Chemistry (FC) and Faculty of Medicine (FM). The study process takes place mainly in the LU House of Nature (since 2015) and LU House of Science (since 2019). All auditoriums have a projector and laptop for presentations, and large auditoriums have sound equipment and recording facilities. Wireless internet coverage is available throughout the building. Study courses and Master’s theses, which include practical work, are carried out in the laboratories of the FB, FC, and FM, which are equipped with the necessary research equipment and data-processing programmes. Study courses and practical work are also carried out in medical treatment institutions and scientific research institutes, e.g. LU has adequate facilities and analytical equipment for physical, chemical and microbiological research. The LU FC has facilities for the determination of bioactive compounds and micro- and macroelements in biological samples, food raw materials and foods, such as the HPLC system: *Waters 2690 Alliance* (column: *Atlantis HILIC Silica*, 2.1x150, filled with 3 µm adsorbent particle size; thermostat +20 °C); HPLC system: *Liquid Chromatographic LC201D* (column: *Waters Spherisorb*, filled with 5 µ, ODS2, 4.6 × 150 mm); detector: diode array UV/visible light SPD-M20A, measured at 284 nm; mobile-phase degassing device: *DGU-20A3*, thermostat 30 °C ± 0.1 °C, CTO-10ASVP; HPLC system: *LC – 20AD* (sample entry system *Auto Sampler SIL – 20 A*); diode array detector *SPD – M20A*; column thermostat *CTO – 10ASvP*; reversed phase *KROMASIL 100 C18* (4.5 × 150 mm, 5 µm); flame atomic absorption spectrophotometer *AAnalyst 200*, *PerkinElmer* with deuterium background correction for

Ca, Mg, Cu, Zn detection etc.

The FB has a collection of Latvian micro-organisms and the necessary laboratory equipment to carry out research on the human microbiome, as well as the necessary materials and equipment to carry out research on nutrition and physiological processes.

The FM has equipment for assessing the analgesic result of laboratory animals in vitro; equipment for cell damage analysis; for anatomy courses – body parts such as the upper limb with arteries, veins and nerves, etc.

The LU library develops three databases: Publications and history database of LU scientists, database of dissertations developed and defended at LU, database of LU final theses. Important international databases are available and used in the Health Care study direction. Students of the StP “Nutrition Studies” can use more than 22 databases to search for information: Britannica Online, Cambridge Journals Online (CJO), EBSCO Academic Search Complete, EBSCO eBook Academic Collection, EBSCO Health Source – Consumer Edition, EBSCO Health Source: Nursing / Academic Edition, EBSCO MasterFILE Premier, EBSCO MEDLINE, Emerald, ISI Web of Knowledge / Web of Science, Letonika, OECD iLibrary, Oxford Reference Online: Premium Collection, Project MUSE (the database is available at the LU Faculty of Social Sciences, Riga, Lomonosova Street 1a), ProQuest Dissertations & Theses, SAGE Journals Online, Science Direct, Scopus, UpToDate.

**Material and technical resources of LBTU.** The Faculty of Food Technology is involved in the implementation of this programme at LBTU. The study process takes place at the Study and Science Centre of the Faculty of Food Technology (Rīgas Street 22a, Jelgava). All auditoriums have a projector and laptop for presentations. Wireless internet is available in the building. The material and technical resources of the study programme are enough to guarantee an effective study process, including the elaboration of Master’s theses on the chosen topic. Master’s students can use the e-environment to study independently and communicate with teaching staff electronically. The study materials are published in the e-environment and are available at <http://estudijas.llu.lv/>. Students of the cooperation universities (RSU and LU) have access to LBTU e-studies. For the preparation of the independent work, including the theoretical review of the Master’s thesis, the LBTU fundamental library with a wide range of scientific literature and diverse databases is available: <http://llufb.llu.lv>. The fundamental library’s electronic catalogue contains information on more than 3,500 titles in the field of food and beverage technology. There are various options for finding information.

Databases: Databases created by the LBTU fundamental library: electronic catalogue of the LBTU fundamental library, publications of LBTU teaching staff and researchers, LBTU defended doctoral theses, LBTU journal and conference articles. Subscribed databases, e-journals, e-books: AGRIS, CABI abstract, CABI Animal Health and Product Compendium, CRC Press, EBSCO e-book Academic Collection, EBSCO database, newspaper library, Letonika, ScienceDirect journals, SCOPUS, Escival, Web of Science, Wiley Online.

The library’s collections in subject areas: agriculture (38%), natural sciences (10%), social sciences (24%), engineering (19%), other sciences (9%), as well as other online resources (encyclopaedias, dictionaries), information search engines and portals (CiteseerX Scientific Literature Digital Library and Search Engine, Elsevier, Springer link, etc.). Since 11 June 2012, the fundamental library provides access to subscribed databases outside the LBTU network with the EZproxy tool using LBTU information systems or e-studies user account. In August 2015, the Study and Science Centre of the LBTU Faculty of Food Technology was put into operation. Thanks to ERDF projects No. 2010/0119/3DP/3.1.2.1.1./09/IPIA/VIAA/009 Modernisation of LLU Study Infrastructure (2010-2015) and No. 2011/0040/2DP/3.1.2.1.1./11/IPIA/VIAA/022 Agricultural Resource Utilisation and Food Research Centre of National Importance (2012-2015), a new building with modern study and

research base for food technology studies and research has been constructed.

The Faculty has the following laboratories for the development of Master's theses: Food Process Laboratory, Food Packaging Laboratory, Sensory Evaluation Laboratory, Microbiology Laboratory, Biotechnology Laboratory; and pilot plants for dairy, meat, fruit and vegetable, grain processing. Laboratories and pilot plants are equipped with modern facilities, small-scale technological equipment for the development and quality testing of 69 food products. In their research, Master's students can use analytical equipment (chromatographs, mass spectrometers, viscometers, analysers of structural-mechanical properties of food, equipment for the determination of fats, proteins, fibres, including dietary fibres, flour property analysers, milk analysers) and technological equipment (dryers of various designs: spray, convection, microwave, sublimation; high-pressure equipment; spray dryer with particle microencapsulation capability; autoclaves, incl. counter-pressure; flow pack packaging machine), technological equipment for the production of meat products (thermal chambers, cutters, etc.), technological equipment for milk processing (cheese, butter, condensed milk products), membrane equipment modules: ultrafiltration, microfiltration, reverse osmosis, nanofiltration; technological equipment for grain processing (mills, furnaces, extruders, etc.); biofermenter complex for the simulation of the gastrointestinal tract function (in vitro process); sensory evaluation result input and analysis system.

**3.3.2. Assessment of the study provision and scientific base support, including the resources provided within the framework of cooperation with other science institutes and higher education institutions (applicable to doctoral study programmes) (if applicable).**

**3.3.3. Indicate data on the available funding for the corresponding study programme, its funding sources and their use for the development of the study programme. Provide information on the costs per one student within this study programme, indicating the items included in the cost calculation and the percentage distribution of funding between the specified items. The minimum number of students in the study programme in order to ensure the profitability of the study programme (indicating separately the information on each language, type and form of the study programme implementation).**

It is planned to finance the study programme from the state budget and the funds of private and legal persons by setting the tuition fee in accordance with the state budget funding without social security in the amount of EUR 7335 of study year. Discounts on tuition fees are possible in accordance with internal regulatory documents. The number of students planned to reach in the two years of study programme is 57 students, with 29 students admitted in the first year of studies, and 1 student predicted to drop out in the following year. After high inflation and rapid increase in energy prices, the result of the study programme with such tuition fee per year is negative due to the lack of funding from the state budget in accordance with the Cabinet Regulations No. 994 – the basic costs of studies no longer cover infrastructure maintenance costs. Information on the additional funding allocated for the performance funding, approved in the budget of the Ministry of Education and Science, will be available on 2nd half of 2023.

The funding is used for staff remuneration, attraction of visiting lecturers, taxes, maintenance of IT

infrastructure, purchase of equipment and facilities and expenditure on study visits. In addition to the direct costs of delivering lectures and conducting classes, the study programmes have to cover infrastructure maintenance costs (premises, IT solutions) and costs of other RSU common resources used in the study programmes. (Student services, Library, organisation of the study process, grant to the Student Union and other support and administrative functions).

The study programme is implemented by the Department of Nursing and Midwifery, Department of Health Psychology and Paedagogy, Department of Welfare and Social Work and Department of Sports and Nutrition of the Faculty of Public Health and Social Welfare, Statistics Unit, Department of Obstetrics and Gynaecology and Department of Clinical Skills and Medical Technology of the Faculty of Medicine, Department of Oral and Maxillofacial Surgery and Oral Medicine of the Faculty of Dentistry, as well as the Department of Rehabilitation of the Faculty of Rehabilitation. Remuneration of academic staff for the first year of the study programme is planned at approximately EUR 22 000.

Table 2. Cost of the Study Programme

<b>Title</b>	<b>Outcome with the existing tuition fee</b>
Average revenue per student, EUR	2 862
Average cost per student, EUR	3 326
Academic staff, %	23
Resources of departments, %	17
Other direct expenditure, %	4
Students' clinical training and placement costs, %	5
Scholarship costs, %	7
Ongoing costs, %	44

## 3.4. Teaching Staff

**3.4.1. Assessment of the compliance of the qualification of the teaching staff members (academic staff members, visiting professors, visiting associate professors, visiting docents, visiting lecturers, and visiting assistants) involved in the implementation of the study programme with the conditions for the implementation of the study programme and the provisions set out in the respective regulatory enactments. Provide information on how the qualification of the teaching staff members contributes to the achievement of the learning outcomes.**

Since the beginning of the StP “Nutrition Studies” (2006), the programme has been implemented with the participation of university staff (RSU, LU, LTBU), specialists in their field with active scientific activity, who work in elected academic positions at their universities, their selection and recruitment comply with the existing university regulations on academic and administrative positions in accordance with the announced competitions and appropriate election procedures.

In each of the cooperation universities (RSU, LU, LTBU), members of teaching staff are involved as visiting lecturers, whose course (or part of a course) in StP “Nutrition Studies” is part of their student teaching load at their principal work in the university (on average in the Nutrition Studies programme – 0.12 workload). Each higher education institution provides its teaching staff with opportunities for growth and professional development in accordance with the Regulation of the Cabinet of Ministers of the Republic of Latvia No. 662 of 11 September 2018 on the education and professional qualification required for teachers. For example, RSU regularly offers courses organised by the Centre for Educational Growth (CEG) for its teaching staff, while the LU Academic Department offers teaching staff courses in university didactics, curatorial competence development, formulation and evaluation of study results. IT departments offered digital skills consultations as part of the transition to remote study process, leading to the launch of remote study process in 2020, which is continuing successfully.

From 1 January 2017 to 1 October 2022, 9 lecturers of study programme “Nutrition Studies” participated in **continuing education activities** of the CEG attending more than 80 training activities of different content. In total, teaching staff of the Nutrition Studies study programme spent 1336 academic hours on continuing education activities. The teaching staff participated in the following CEG activities: Reference Management Tool EndNote; Remote Group Work of Students Using the Miro Tool; Collaboration and Partnership Towards Professional and Sectoral Development: Local, National, Transnational; PubMed Database and Its Tools for Searching Scientific Publications; Possibilities and Comparison Of Web of Science and Scopus Databases; Teaching in a Cross-Cultural Environment; Think Tank: How to Assess to Learn?; Think Tank: Feedback as a Source of Cognition and Possibility for Self-Improvement; Creating Electronic Tests; Creating Interactive Content in the E-learning Environment (H5P); Interactive Presentations and Real-Time Feedback in the Mentimeter Tool; How to Create Effective Image and Text Compositions in Learning Materials; Research Methodology and Statistical Processing of Data; The Art of Speech in Pedagogical Work; Visualisation of Content in Presentations; Development of a Study Course. Formulation and Assessment of Learning Outcomes and many other.

An important indicator of the qualification and quality of work of the teaching staff is the students' evaluation at the end of each semester - the survey is conducted electronically. The results of the survey are available to study program directors, heads of structural units and each teaching staff individually (evaluation of the study course taught in the relevant semester). The results of the survey and the comments provided in it give the lecturer the opportunity to evaluate and improve his work, and provide the director of the study program with insight and recommendations for improving the quality of the study courses and the program. Heads and management of structural units use the information obtained from the surveys for measures to improve the quality of studies at the university level. The results of the survey are one of the criteria in the RSU faculty motivation system.

The implementation of the mandatory and limited optional part of the academic master's study program "Nutrition Science" is provided by 11 lecturers in the courses implemented by RSU, 8 of whom are elected to RSU academic positions (see analysis in Annex 24.7). Of the 8 elected representatives of the academic staff, one is a professor and two are associate professors, 3



lecturers, one assistant and 1 leading researcher. Summarising the information on teaching staff who are RSU alumni, it has been concluded that 37 lecturers have graduated from RSU study programmes (from one to four), while five lecturers are currently (in the academic year 2022/2023) studying in one of the programmes. Both elected and invited lecturers have been active in research, health care and science for many years, therefore they can be considered specialists in the field, who are knowledgeable both in the past development of nutrition science and in current development trends. All lecturers have more than 7 years of experience in academic work in health care. Summarizing the above, it can be said that very experienced specialists in the field of Nutrition science are involved in the program.

### **3.4.2. Analysis and assessment of the changes to the composition of the teaching staff over the reporting period and their impact on the study quality.**

The percentage of teaching staff involved in the implementation of the StP “Nutrition Studies” is influenced by all the elective courses included in the programme and the teaching staff renewal process. If the calculation includes the B courses chosen by students in each academic year, the percentage of teaching staff changes, e.g. in the academic year 2019/2020, the percentage of teaching staff involved in the implementation of the study programme was as follows: professors – 20%, associate professors – 43%, assistant professors – 8%, lecturers – 29%; by degree: holders of doctoral degree – 71%, of whom 63% are professors and associate professors. Employment relations have been terminated with nine members of teaching staff, including five professors, two assistant professors and two lecturers, instead of whom study courses are implemented by lecturers with knowledge, skills and research and professional competences corresponding to the subject of the course. For example, part of the course Regulation of Physiological Functions in the Human Body headed by Professor Juris Imants Aivars is led by Associate Professor Līga Plakane, who also implements the course Psychology of Nutrition and Neurotic Eating Disorders headed by Professor Jānis Sīpols. Alumni of the programme are successfully involved in the implementation of the programme, for example, Nutrition and Physical Load course was previously headed by prof. Inta Māra Rubana, now – by alumna of the Nutrition Studies programme Māra Kampara in cooperation with Signe Rinkule, Alise Kindzule (also alumni of the programme); Inga Šmate in the Nutrition Policy course was replaced by Maija Ceruka, alumna of the programme who is a senior expert on health promotion and addiction prevention at the Department of Public Health of the Ministry of Health, etc.

The new members of teaching staff, by being involved in the implementation of the study programme, ensure continuity in the training of students through their alumni experience. Members of teaching staff have increased their qualifications and have been elected to higher positions during the reporting period, e.g. Assistant Professors Māris Bukovskis, Laila Meijs, Gundars Selga, etc. now hold the position of Associate Professor, which has increased the number of Professors and Associate Professors from 55% to 63%. In the academic year 2019/2020, the programme was implemented by a total of 37 teaching staff members of the universities (LU, LTBU, RSU) and industry professionals, comprising 21 (54%) teaching staff members who started implementing the programme in 2006.

A process of teaching staff renewal takes place within the framework of the programme. Teaching staff members from disciplines relevant to the course and nutrition science professionals, as well as alumni of the nutrition studies programme, are involved in the implementation of the programme. Involvement of alumni ensures that the content of the programme is improved and that there is no

duplication of course topics, as the knowledge, skills and competences they have acquired during their own studies in the programme enable them to assess the quality of the programme more objectively, critically and reasonably, and to plan improvements to the programme, for example, by adding courses on the development of diets for specific individuals.

**3.4.3. Information on the number of the scientific publications of the academic staff members, involved in the implementation of doctoral study programme, as published during the reporting period by listing the most significant publications published in Scopus or WoS CC indexed journals. As for the social sciences, humanitarian sciences, and the science of art, the scientific publications published in ERIH+ indexed journals or peer-reviewed monographs may be additionally specified. Information on the teaching staff included in the database of experts of the Latvian Council of Science in the relevant field of science (total number, name of the lecturer, field of science in which the teaching staff has the status of an expert and expiration date of the Latvian Council of Science expert) (if applicable).**

**3.4.4. Information on the participation of the academic staff, involved in the implementation of the doctoral study programme, in scientific projects as project managers or prime contractors/ subproject managers/ leading researchers by specifying the name of the relevant project, as well as the source and the amount of the funding. Provide information on the reporting period (if applicable).**

**3.4.5. Assessment of the cooperation between the teaching staff members by specifying the mechanisms used to promote the cooperation and ensure the interrelation between the study programme and study courses/ modules. Specify also the proportion of the number of the students and the teaching staff within the study programme (at the moment of the submission of the Self-Assessment Report).**

Implementation of the joint academic Master's study programme is carried out by direct cooperation in direct study process of the teaching staff involved in the programme through joint implementation of courses or parts of courses included in one module (e.g. in the course Dietary Supplements at LU and Food Additives at LTBU; in the course Novel Foods (LTBU) and Genetically Modified Organisms (LU); in the course Medical Nutrition in the Treatment of Chronic Diseases (LU and RSU), etc. There are many study courses involving several lecturers, such as the course Nutrition Policy and Nutrition Studies, led by the programme director Lolita Neimane and Maija Ceruka, who agree both on the course content and on the common assessment of the study course.

Cooperation also takes place in scientific research through joint research projects; for example, alumni and academic staff of the StP "Nutrition Studies" participated in the implementation of a project co-funded by the ERDF programme Entrepreneurship and Innovations, activity 2.1.1.1 –

Assessment of the Potential of Local Cereal Species and Extraction of Varieties for Production of Special Dietary Foods (No. 2DP/2.1.1.1.0/10/APIA/VIAA/083) and the ESF co-funded project Establishment of a New Scientific Group for Cross-Sectoral Research on Assessment of Local Material of Cereal Selection Using Dietary Potential Indicators and Their Use in Prevention of Chronic Intestinal Diseases (No. 2013/0072/1DP/1.1.1.2/13/APIA/VIAA/032). Cooperation on implementation of these projects has shown that alumni of the study programme and teaching staff involved in the implementation of the study programme are knowledgeable and possess relevant skills to be able to carry out successful research in a fairly complex interdisciplinary project including assessment of the biochemical composition and nutritional value of products and organisation of clinical research.

Teaching staff jointly organise international conferences such as Nutrition and Health (2012, 2016, 2020), ensure that the Nutritional Studies programme corresponds to the knowledge, skills and competences of Level 7 of the Latvian Qualifications Framework (LQF). During the academic year 2017/2018, after the 2nd international conference Nutrition and Health (5–7 October 2016), the teaching staff of the universities (LU, LTBU, RSU) prepared 35 scientific articles, which were published in the Proceedings of the Latvian Academy of Sciences, Part B, based on 52 reports and 47 poster presentations presented at the conference, in which 352 scientists' studies were presented.<sup>[1]</sup>

These activities provide an opportunity to use the current issues and problems in nutrition science, which have been systematically and purposefully addressed in Latvia (by the teaching staff and scientists involved in the programme implementation) for updating the programme courses and raise them for discussion among a wider range of interested parties in Latvia, and at the international level – to create interest among scientists in other countries about the ongoing research in nutrition science in Latvia through the database [www.degruyteropen.com](http://www.degruyteropen.com), Web of Science, and Scopus.

Researchers' Nights are organised jointly. At the EU Researchers' Night 2019 Science for the Future, Master's students collaborated with representatives of SIA On plate (alumni of the programme and specialists of the field) and attendees had the opportunity to receive science-based explanations on nutrition and metabolic assessment, the importance of a balanced diet and physical activity for a healthy life, and research in nutrition and sports science carried out by Latvian specialists of nutrition and sports science.

During the EU Researchers' Night 2018, teaching staff and students of the Nutrition Studies programme jointly organised an event on Ethnic and Traditional Dishes in Contemporary Latvia, in line with the EU's focus on the cultural heritage of each country and its people. Attendees of the Researchers' Night (the total number of which was around 600) were given the opportunity to taste our traditional dish *bukstiņbiezputra* and rye breads made by our cooperation partner Latvian Bakers' Association, as well as "Milzu" rye flakes produced using innovative technologies (SIA Milzu), candied cranberries (Gundegas farm) and apples grown in Dobeles (Dobele Institute Of Horticulture), while from research results and explanations included in the poster reports of programme lecturers (RSU, LU, LTBU) and cooperation partners, attendees received information about the nutritional value-determining components of food products, their impact on health, and were able to have their diet assessed by nutritionists with bioimpedance weight measurements.

The ratio of the number of students and teaching staff in the study programme is: 65 students and 80 lecturers. The ratio of students to teaching staff is 0.8.

<sup>[1]</sup> Proceedings of the Latvian Academy of Science. Vol. 71, 2017, Number 6 (401–527; 20 articles) and Vol. 72, 2018, Number 2 (43–130; 15 articles).

# Annexes

III - Description of the Study Programme - 3.1. Indicators Describing the Study Programme		
Sample of the diploma and its supplement to be issued for completing the study programme	24.1_Anx_Diploma_and_Diploma_Supplement_Nutrition_Science.pdf	24.1_Diploms_un_diploma_pielikums_KAMSP_Uzturzinatne.pdf
For academic study programmes - Opinion of the Council of Higher Education in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions (if applicable)	AIP_pielik_prasiba_iznemta_no_AL.pdf	AIP_pielik_prasiba_iznemta_no_AL.pdf
Compliance of the joint study programme with the provisions of the Law on Higher Education Institutions (table) (if applicable)	15_Anx_Compliance_to_Joint_StP_Regulations_Nutrition_Science.pdf	15_pielik_Kopigas_StP_atbilstiba_Uzturzinatne.pdf
Statistics on the students in the reporting period	16_Anx_Statistics_Nutrition_Science.pdf	16_pielik_Uzturzinatne_statistika_lv.pdf
III - Description of the Study Programme - 3.2. The Content of Studies and Implementation Thereof		
Compliance with the study programme with the State Education Standard	17.1_pielik_KAMSP_Uzturzin_atbilst_valsts_izgl_standartam_ENG.pdf	17.1_pielik_AMSP_Uzturzin_atbilst_valsts_izgl_stand.pdf
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard or the requirements for professional qualification (if applicable)		
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)		
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	18.1_pielik_St_kursu_kartejums_StP_St_Rezultatiem_KAMSP_Uzturzinatne_ENG.pdf	18.1_pielik_St_kursu_kartejums_StP_St_Rezultatiem_KAMSP_Uzturzinatne.pdf
The curriculum of the study programme (for each type and form of the implementation of the study programme)	19_pielik_KAMSP_Uzturzinatne_planojums_eng.pdf	19_pielik_KAMSP_Uzturzinatne_planojums.pdf
Descriptions of the study courses/ modules	20_Anx_Study_course_description_Nutrition_Science.pdf	20_pielik_Kursu_apr_Uzturzinatne.pdf
Description of the organisation of the internship of the students (if applicable)		
III - Description of the Study Programme - 3.4. Teaching Staff		
Confirmation that the academic staff of the doctoral study programme includes not less than five doctors, of which at least three are experts approved by the Latvian Council of Science in the branch or sub-branch of science in which the study programme intends to award a scientific degree (if applicable)		
Confirmation that the academic staff of the academic study programme complies with the requirements specified in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions (if applicable)	24.7_Anx_Analysis_Composition_Academic_Staff_Nutrition_Science.pdf	24.7_pielik_Akad_pers_sastava_analize_KAMSP_Uzturzinatne.pdf

# Occupational Therapy (42722)

Study field	<i>Health Care</i>
ProcedureStudyProgram.Name	<i>Occupational Therapy</i>
Education classification code	<i>42722</i>
Type of the study programme	<i>Professional bachelor study programme</i>
Name of the study programme director	<i>Zane</i>
Surname of the study programme director	<i>Liepina</i>
E-mail of the study programme director	<i>Zane.Liepina@rsu.lv</i>
Title of the study programme director	<i>Mg.sc.sal.</i>
Phone of the study programme director	
Goal of the study programme	<i>Provide the opportunity to obtain a professional Bachelor's degree in health care and to learn professional education in occupational therapy based on the theoretical foundations of the field, in accordance with the Occupational Standard for the Occupational Therapist and the minimum standard of the World Federation of Occupational Therapists in the education of occupational therapists and the Republic of Latvia Regulations on professional studies in occupational therapy.</i>
Tasks of the study programme	<p><i>Provide professional studies in occupational therapy that are in accordance with the Occupational Standard for the Occupational therapist and the Regulations of the Cabinet of Ministers of the Republic of Latvia, applicable in practice, through the acquisition of in-depth knowledge in occupational therapy;</i></p> <p><i>Prepare students for creative, research and teaching work in the field;</i></p> <p><i>Promote the competitiveness of the programme graduates in the changing socio-economic conditions in the local and international labour market.</i></p>

Results of the study programme	<p><i>Knowledge:</i></p> <p>1. Apply conceptual practice models and occupational therapy technologies to promote interaction between the person's activity and the environment, equal rights and opportunities for participation in the activity, according to the specific situation and needs of the client/patient.</p> <p><i>Skills:</i></p> <p>2. Basic skills in research methodology in order to participate in research and related projects, to contribute to the development of occupational therapy and to promote innovative activities in the profession, and to implement, summarise and present research findings.</p> <p>3. Apply medical technologies of occupational therapy, independently or as part of a multiprofessional team, working with different client/patient groups individually or in a group, according to the context of practice and the needs of the client/patient's activity.</p> <p><i>Competencies:</i></p> <p>4. Evaluate the effectiveness of occupational therapy in improving client/patient health, reducing functional impairment, promoting health, and justify the decisions taken.</p> <p>5. Independently direct the development of own competences and lifelong learning by integrating new knowledge into practice.</p> <p>6. Implement ethical responsibility in practice, comply with bioethics and human rights standards.</p>
Final examination upon the completion of the study programme	National Examination, defence of the Bachelor's thesis

## Study programme forms

### Full time studies - 4 years - latvian

Study type and form	Full time studies
Duration in full years	4
Duration in month	0
Language	latvian
Amount (CP)	160
Admission requirements (in English)	Secondary education
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	Professional Bachelor's Degree in Health Care
Qualification to be obtained (in english)	Occupational Therapist

### Places of implementation

Place name	City	Address
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### 3.1. Indicators Describing the Study Programme

**3.1.1. Description and analysis of changes in the parameters of the study programme made since the issuance of the previous accreditation form of the study field or issuance of the study programme license, if the study programme is not included on the accreditation form of the study field, including changes planned within the evaluation procedure of the study field evaluation procedure.**

Table 1. Changes in StP parameters

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period	Planned changes within the assessment procedure
1.	Study direction	—	—
2.	Title of StP	—	—
3.	Code according to the Latvian Education Classification	—	—
4.	Head of StP	—	—
5.	Scientific degree of the Head of StP	—	—
6.	Aim of StP	Editorial clarifications.	—
7.	Tasks of StP	—	—
8.	Learning outcomes to be achieved	Editorial clarifications.	—
9.	Final examination upon the completion of StP	—	—
10.	Type and form of studies	—	—



<b>No.</b>	<b>Parameter</b>	<b>Description and analysis of changes in StP parameters during the accreditation period</b>	<b>Planned changes within the assessment procedure</b>
11.	Duration of implementation	—	—
12.	Language of implementation	—	—
13.	Volume of StP (CP)	—	—
14.	Admission requirements	The Objective Structured Clinical Examination (OSCE) was removed from the admission requirements, as it was decided not to continue to implement it when assessing the usefulness of the exam in the collegiate institutions of the RSU.	—
15.	Degree to be awarded	—	—
16.	Qualification to be awarded	—	—
17.	Place of implementation	—	—

Table 1 clearly shows that admission conditions have changed in StP in the reporting period, see Paragraph 14. In the reporting period, the Professional Bachelor's study programme "Occupational Therapy" (programme code: 42722) had changes in StP parameters relating to admission requirements for applicants, which were supplemented with CE assessment in Mathematics, and

the OSCE examination was removed. There were no other changes in StP parameters since issuing of the previous accreditation sheet for the study direction Health Care, however, clarifications to learning outcomes were made during mapping and to achieve StP outcomes more effectively, courses of the study programme were modernised (“General rehabilitation” (3 KP/4.5 ECTS) and study courses “Evaluation and Classification of functional capacity limitations” (2 KP/3 ECTS), “Biopsychosocial approach to palliative care for adults” (2 KP/3 ECTS) obtained [Philanthropic Boriss and Inara Tetereva Foundation](#) scholarship for modernisation) and their implementation has been improved. Video lectures with self-assessment test questions, clinical cases and descriptions thereof, updated assessment criteria have been prepared in study courses. In the study course “General rehabilitation” multi-professional co-operation of students is implemented by organising mixed groups of students, which form multi-professional teams (occupational therapist, physiotherapist, nutritionist, audiologist/speech therapist, technical orthopaedic and social worker) in accordance with the context of clinical case practice, which enables students to learn the formation of co-operation among team members at the preclinical stage.

**3.1.2. Analysis and assessment of the study programme compliance with the study field. Analysis of the interrelation between the code of the study programme, the degree, professional qualification/professional qualification requirements or the degree and professional qualification to be acquired, the aims, objectives, learning outcomes, and the admission requirements. Description of the duration and scope of the implementation of the study programme (including different options of the study programme implementation) and evaluation of its usefulness.**

The study programme “Occupational Therapy” has been implemented at Rīga Stradiņš University since 1996 in cooperation with the Government of Sweden and the Swedish Association of Occupational Therapists. The study programme was created and improved in accordance with the Minimum Standards for the Education of Occupational Therapists of the World Federation of Occupational Therapy (WFOT)[1] and the recommendations of the European Network in Higher Education of Occupational Therapy (ENOTHE) and harmonisation of study programmes in Europe[2]. The study programme “Occupational Therapy” is an active member of the network. It participates in international activities for the improvement and internationalisation of European occupational therapy studies.

The **aim** of the study programme “Occupational Therapy” is to ensure the possibility to get a professional Bachelor’s degree in Health Care and obtain professional education in occupational therapy based on theoretical bases of industry sciences in accordance with the standard for [the occupational therapist’s profession](#) (15.12.2021. standard only in Latvian), and CM Regulations No. 512 of the Republic of Latvia “Regulations on the National Standard of the Second Level Professional Higher Education” and professional studies in occupational therapy corresponding to the Minimum Standards for the Education of Occupational Therapists of the World Federation of Occupational Therapy.

The main **tasks** of the study programme are to ensure professional studies in occupational therapy corresponding to the Profession standard for an occupational therapist and CM Regulations of the Republic of Latvia and used in practice by learning in-depth knowledge in occupational therapy; to prepare students for professional, creative, research and teaching work in the field; to foster competitiveness of graduates of the programme in existing socioeconomic conditions in the domestic and international labour market.

The **learning outcomes** achieved by students in the study programme, make it possible to start professional activity in accordance with the tasks of an occupational therapist defined in the profession standard. Graduates have obtained knowledge, skills corresponding to the qualification of an occupational therapist based on the latest scientific achievements, which enable graduates to practice in different occupational therapy contexts after graduation from the study programme providing occupational therapy services. They have been formulated in accordance with the learning outcomes defined for level 5 and 6 studies of the European Qualifications Framework, as well as shaped in accordance with the Minimum Standards for the Education of Occupational Therapists of the World Federation of Occupational Therapy.

Recommendations on occupational therapy education provided by professional associations – Latvian Association of Occupational Therapists, World Federation of Occupational Therapy, Council of Occupational Therapists for the European Countries and European Network in Higher Education of Occupational Therapy – are taken into account in the process of improving the study programme.

The name of the study programme, the degree to be acquired, professional qualification or degree and professional qualification, aims, objectives, learning outcomes and admission requirements of the study programme are interrelated. The study programme (StP) “Occupational Therapy” corresponds to the study direction “Health Care”, degree to be obtained – professional Bachelor’s degree in Health Care and professional qualification of an occupational therapist.

The conformity of the study programme with the profession standard was determined by performing mapping of the results of study programme and study course learning outcomes, and demonstrates the mutual conformity thereof. The professional Bachelor’s study programme in healthcare with qualification in occupational therapy has been established in accordance with Cabinet Regulation No. 305 of the Republic of Latvia, Regulations regarding the State Standard of Professional higher Education, and the title thereof clearly indicates the content of the programme and the qualification to be obtained, in which professionals in one of the functional specialist professions relevant for rehabilitation are prepared. Code of the study programme (42722) conforms to Cabinet Regulation No. 322 Regulations regarding Classification of Education of Latvia and indicates the level of Education of the study programme (figures 42: Fifth level Professional qualification and Professional Bachelor's degree), as well as compliance with the direction of Health care (figures 722: thematic area - healthcare and programme group - medical services). The structure and content of the study programme allows implementation of the objectives and tasks of the study programme, as well as achievement of the learning outcomes provided for in the study programme and preparation of alumni for the performance of such professional tasks, which are determined by the standard of the profession of occupational therapist.

The development of the study programme takes into account the recommendations and recommendations of local and international professional associations (Latvian Association of occupational therapists, World Federation of Occupational Therapy (WFOT) European Network of Occupational Therapy in Higher Education (ENOTHE)) for the education of occupational therapists.

[1] WFOT, The Minimum Standards for the Education of Occupational Therapists, in English available at:

<https://wfot.org/resources/new-minimum-standards-for-the-education-of-occupational-therapists-2016-e-copy>

[2] ENOTHE, 2022, in English available at:

<https://enothe.eu/e-c-o-l-e-enothe-center-for-learning-exchange/tuning/>

### **3.1.3. Economic and/ or social substantiation of the study programme, analysis of graduates' employment.**

In 2022, a survey of graduates was conducted in cooperation with the Latvian Association of Occupational Therapists, using a uniform questionnaire of graduates developed by the RSU Alumni Association, the RSU Academic Affairs Department, and the Centre for Educational Growth. The survey included 68 graduates of the professional Bachelor's study programme "Occupational Therapy", 47 of whom graduated from the study programme in the last 6 years, and the results show that the vast majority of graduates (n=60) work in a field fully related to the study programme. Overall, 57 respondents evaluate the study programme as good and very good. When asked of their assessment of their skills to apply knowledge and practical skills in the labour market, 55 responded with "good" and "very good," while 12 evaluated them as "average". Of those working in the sector, 55 consider the knowledge and skills acquired in the study programme useful. And 65 respondents note that the education obtained contributed to finding a job.

The results of student surveys are taken into account in the improvement of the study programme. For example, the planning of lectures has been reviewed, and therefore lectures are provided online and are prepared in the video format or video lectures are available in the e-learning environment enabling students to plan their time for studies more flexibly. The study courses "Somatic Diseases", "Occupational Therapy in Paediatrics", "Biopsychosocial Approach to Palliative Care for Adults" introduce self-assessment tests, where students can test knowledge after learning theoretical material. Following advice from the professional association and employers, study courses include content on modern technology applications in evaluation and occupational therapy, for example, the study course "System of Circulation of Technical Aids" includes the acquisition of skills for evaluating the sitting posture and pressure of wheelchair users using a medical pressure meter, the study course "Occupational Therapy in Paediatrics" extends the range of subjects to be learnt by students to include alternative and augmentative communication, using cooperation with distributors of medical devices in the field it is possible to practically learn the skills to adapt and use advanced alternative communication devices for working with patients with limited communication abilities. In cooperation with the Tiflotechnics Room of the non-governmental organisation "Latvian Society of the Blind", students have the opportunity to learn and try tiflotechnics during the study process. The recommendations of employers are based on changes in the regulatory enactments regarding supplementation of the range of state-funded technical aids for persons with functional disorders, which indicates the necessity for the study programme to follow up on the amendments to the current regulatory enactments in the field of services. The study course "General Rehabilitation" introduces a study process in mixed multi-professional teams, which enables students to demonstrate the identity and role of each profession in working with the clinical case analysis when cooperating in a team, which further enables the transfer of acquired experience, knowledge and skills to clinical placement in different medical treatment institutions and in the field of social services.

The student survey results indicate the need to ensure accessibility of clinical placement in regions, which is also supported in cooperation with employers, searching for new clinical placement sites in regional hospitals, rehabilitation centres in different regions of Latvia. The study programme supports students' desire to implement clinical placement closer to students' place of residence to strengthen the return of graduates to regions where the shortage of occupational therapists is pronounced[1], which limits the reception of occupational therapy services, as well as makes it difficult to develop new clinical placement sites. During clinical placement, employers also have the opportunity to recruit potential employees after they graduate from the study programme, which is

also often used.

In the survey of employers on competitiveness of compliance of study programmes with medium-term and long-term labour market and industry development trends conducted by SIA “*Dynamic University*”, employers confirmed that they generally highly appreciate preparedness of students for clinical placement and the qualification of graduates, which corresponds to labour market requirements, as well as confirm that the demand for industry specialists is invariably high. According to research of SIA “*Dynamic University*”, labour market studies show that demand for care professionals will increase. Introduction of technologies and learning to use the technologies and provision of remote services will be important for the health sector, as well as ageing of the population as a whole will foster an increase in demand for health care services and a demand for health services specifically focusing on seniors[2]. In general, the study programme “Occupational Therapy” follows the future trends indicated by researchers and additionally introduces in the study process topics or study courses on the use of technologies and population ageing, such as the study course “Occupational Therapy in Geriatrics, Gerontology”, “Occupational Therapy in Public Health” and a new study course “Biopsychosocial Approach in Palliative Care” has been created, as well as students have the opportunity to participate annually in the intensive training programme in Belgium “*Interdisciplinary Programme on Palliative and End-of-Life Care*”.

Students and lecturers of the study programme “Occupational Therapy” are active participants in promoting the study programme and the profession, take part in activities organised by RSU and Latvian Association of Occupational Therapists. Each year, students participate in the exhibition “School”, the RSU Open Doors Day, as well as celebrating the World Occupational Therapy Day in cooperation with the professional association’s student subgroup. Individual students cooperated with their former education institutions and perform the duties of the RSU Ambassador, educating students about their study programme choice and future career opportunities after graduating from a secondary school. Students and graduates of the last years of studies are involved in the implementation of the study course “Basics of Occupational Therapy” and “Introduction to Professional Studies and Research,” where they successively pass on their experience to first-year students, which is highly appreciated annually in student surveys. First-year students note that they have taken the opportunity to participate in the “Shadow Days” hosted by *Junior Achievement Latvia* to familiarise themselves with the profession of an occupational therapist and the work of an occupational therapist in various practice contexts, which had been suspended or was held in a limited manner due to the pandemic, but since 2022, the educational activity has been available to pupils again.

According to statistics, Latvia still has a relatively lower number of occupational therapists per capita compared to other EU countries (11.25 occupational therapists per 100,000 inhabitants)[3], as well as the availability of occupational therapists in regions of Latvia is very limited. Data compiled according to the [Health Inspectorate Register of medical practitioners and medical treatment support persons \(Latvian only\)](#) on 1.06.2023.

*Figure 1. Availability of occupational therapists in regions of Latvia (data as at 2023, 210 occupational therapists in total)*

#### INTERAKTĪVA KARTE AR ERGOTERAPEITU PRAKSES VIETĀM UN KONTAKTIEM.



The labour market has constantly high demand for graduates of the study programme, the information is available on the [vacancy portal of the State Employment Agency](#) (Latvian only) and the Internet site of the Association of Latvian occupational therapists [www.ergoterapija.lv](http://www.ergoterapija.lv) (Latvian only), indicating that on 01.10.2023. There are 15 occupational therapist vacancies available in various regions of Latvia and Riga, while the situation in Riga is particularly critical in the regions, which were highlighted in national procurement procedures for the provision of health care services with contracting authorities of the national Health Service (palliative care mobile crews, home health services, etc.).

Summary:

Cooperation with graduates:

1. The opinions expressed in the graduate surveys are analysed;
2. A representative of graduates participates in the work of the Quality Council of StP "Occupational Therapy".

Cooperation with employers:

1. The involvement of employers in the work of the Quality Council of StP "Occupational Therapy". A representative of employers, together with other members of the StP Quality Council, participates in the discussion of topical matters related to the study process;
2. Study of employers' opinions by analysing "Employer questionnaire" information;

Involvement of employers in the national degree examination and Bachelor's thesis defence boards.

[1] LEA, Interactive map (only in Latvian), available at:  
<https://ergoterapija.lv/pacientiem/kur-meklet-ergoterapeitu>



[2] SIA “Dynamic University” Project: Investigation of the competitiveness of Rīga Stradiņš University (RSU) and RSU Red Cross Medical College (RSU RCMC) Study Programmes and Compliance with Medium- and Long-Term Development Trends of the Labour Market and Industry”

[3] COTEC, Summary of Profession, 2022, in English available at:  
<https://www.coteceurope.eu/wp-content/uploads/2022/06/Summary-of-the-Profession-2022.pdf>

**3.1.4. Statistical data on the students of the respective study programme, the dynamics of the number of the students, and the factors affecting the changes to the number of the students. The analysis shall be broken down into different study forms, types, and languages.**

The study programme “Occupational Therapy” has 36 state-funded study places in full-time studies and additional 9 study places for tuition fee are planned. The increase in state-funded study places from 24 to 36 has been available since academic year 2020/2021 and was justified by high demand of health and social care sectors for occupational therapists in the labour market. The number of students willing to study is always high and there have been 304 applications on average for 36 state-funded study places in the last three years, which is high competition per one state-funded study place, except for students with high results in centralized examinations.

Table 2. Number of applications for study places in StP over the last five years

Year	Number of state-funded places	Number of places for tuition fee	Number of applicants for StP state-funded study places
2018	24	3	202
2019	24	6	315
2020	36	6	314
2021	36	6	291
2022	36	9	307

During the accreditation period, the number of students has risen since academic year 2020/2021 due to the increase in state-funded places from 24 to 36 and has already reached 136 students in academic year 2022/2023, with three academic groups in the first, second academic year, and two in the third, fourth year, respectively. The increase in the number of students is due to the demand in the labour market for occupational therapists and the demand is growing in all sectors – state, local government and private sector, as well as the recognition of the profession in Latvia is growing and new services are developed, where occupational therapists are employed. The number of students studying in study programmes for tuition fee is relatively low, but the trend of recent years shows that the potential employer (local government, regional medical treatment institution) covers students’ tuition fees on the basis of a cooperation agreement. However, the number of

occupational therapists in Latvia is still insufficient compared to the average of European Union member states.

There is a decrease in the number of students in the first year of studies after the winter and summer sessions, where the main reasons for terminating studies are poor academic performance and withdrawal. The indicators and reasons of students' academic failures are analysed at the Council meetings of the Faculty of Rehabilitation and the main reasons are related to the difficulties of first year students to organise themselves for the study process and to systematically learn study material, as well as the distribution of priorities in working students which result in unsuccessful results in examinations. In the third and fourth years of studies, changes in the number of students and drop-outs are small. The main reasons for withdrawal are related to imprecisely defined priorities when choosing a study programme, as well as student's understanding of the profession of occupational therapist, which are clarified during discussions with the director of the study programme and the dean of the Faculty of Rehabilitation.

Students of the study programme "Occupational Therapy" are motivated by lecturers and actively use international mobility opportunities in Erasmus+ clinical placement programmes, Erasmus+ blended intensive programmes and Nordplus networking intensive training programmes. Erasmus+ clinical placement is implemented by students in partner universities with which Erasmus+ agreements<sup>[1]</sup> have been concluded, and students chose themselves a university for the implementation of clinical placement, defining priorities such as VIVES University of Applied Sciences (Belgium), Helsinki Metropolia University of Applied Sciences (Finland). The Erasmus+ clinical placement mobility is quantitatively limited, i.e. every academic year two students can travel to mobility outside Latvia. The study programme "Occupational Therapy" also welcomes incoming Erasmus+ mobility students who implement clinical placement at RSU and cooperate with students of the study programme. The study programme welcomes 2 to 4 international students every year.

The proportion of students participating in intensive training programmes is significantly higher among students of the study programme, with students mostly participating from the second academic year, for example in academic year 2022/2023, all second-year students and two lecturers participated in a project coordinated by the VIVES University of Applied Sciences (Belgium) "International project: Sustainability and Loneliness" with the involvement of seven international partners, providing students with the opportunity to gain their first international cooperation experience with foreign lecturers and students from other European universities (Finland, Spain, Belgium, Denmark, Portugal, Ukraine) on integrating the United Nations Sustainable Development Goals into health and occupational therapy.

Every academic year 3 - 4 occupational therapy students (during the accreditation period a total of 19 students participated in the programme and in academic year 2021/2022 15 students participated in the online mode and in the e-environment (under the influence of the COVID-19 pandemic)) and one lecturer participate in the intensive training programme "Interdisciplinary Programme on palliative and End of Life Care" organised by Artevelde University of Applied Sciences, which has been funded by Erasmus+ funding since academic year 2021/2022, enabling students to benefit from Erasmus+ financial support for short-term mobility (BIP programme).

Each academic year, 2 - 3 occupational therapy students (12 in total during the accreditation period) and one lecturer participated in the Nordplus networking mobility programme, which is implemented as an intensive training programme "*Occupation-based perspective on social inclusion*" in cooperation with partner organisation universities in Europe (Finland, Denmark, Sweden, Iceland, Estonia). The study programme "Occupational Therapy" is an active participant in the networking and participates in the creation and implementation of programme content.



Starting from academic year 2021/2022, the study programme has started cooperation with Ghent University and participates in the Erasmus+ funded BIP programme “Internationale module of Pediatric Rehabilitation” (3 ECTS) and in academic year 2022/2023 three students of the study programme participate in the programme.

The study programme “Occupational Therapy”, in cooperation with the Latvian Association of Occupational Therapists, participates in the intensive training programme “Integrative Care for the Elderly” (in the amount of 3 ECTS) within the framework of the Nordplus MultiNEC cooperation programme, where 3-4 students and one lecturer participate annually, and 22 students and two lecturers participated during the accreditation period in total. The location of the programme is variable and it is implemented annually by one of the partner institutions or organisations.

Starting from academic year 2021/2022, the study programme has started new cooperation with the FH Joanneum University of Applied Sciences (Austria), participating in the development of the intensive programme and in academic year 2022/2023, 5 students and one lecturer will participate in the programme “Promoting the health of vulnerable groups in a community: Interprofessional approaches and international comparison”.

The study programme “Occupational Therapy” chooses the content of mobility programmes according to the content of the study programme so that it can be integrated into study courses, for example, it has so far successfully managed to do this in study courses “Occupational Therapy in Public Health”, “Occupational Therapy in Geriatrics, Gerontology”, “Occupational Therapy in Paediatrics” and “Occupation and Cultural Environment”, as well as the content and amount of studies acquired internationally is equivalent to the corresponding study courses in accordance with the procedures for equivalence set by the Faculty of Rehabilitation.

The study programme “Occupational Therapy” actively maintains communication with international partners and participates in the development and implementation of intensive programmes, thus providing opportunities for students and lecturer to master international study and teaching experience. *The number of international cooperation agreements enables students to participate in Erasmus+ mobility programmes, but it should be noted that mobility data is affected by quantitative restrictions on the study programme and from 2020 to 2022 also experienced the impact of the COVID-19 pandemic.*

[1] Erasmus+ partner universities, available at:

<https://www.rsu.lv/starptautiska-sadarbibas/mobilitates-programmas/sadarbibas-augstskolas-medicinas-un-veselibas>

### **3.1.5. Substantiation of the development of the joint study programme and description and evaluation of the choice of partner universities, including information on the development and implementation of the joint study programme (if applicable).**

## **3.2. The Content of Studies and Implementation Thereof**

### **3.2.1. Analysis of the content of the study programme. Assessment of the interrelation**

**between the information included in the study courses/ modules, the intended learning outcomes, the set aims and other indicators with the aims of the study course/ module and the aims and intended outcomes of the study programme. Assessment of the relevance of the content of the study courses/ modules and compliance with the needs of the relevant industry, labour market and with the trends in science on how and whether the content of the study courses/ modules is updated in line with the development trends of the relevant industry, labour market, and science.**

The professional Bachelor's study programme "Occupational Therapy" with a Bachelor's degree in health care and an occupational therapist's qualification to be obtained, is a four-year full-time study programme. Each year of studies has two semesters, each semester closes with an examination period during which the knowledge, skills and competences acquired by students are examined. In accordance with Cabinet Regulation No. 305 "Regulations regarding the national Standard for Professional higher Education", students should get 160 credit points / 240 ECTS during the study programme. Of this amount, 26 CPs / 39 ECTS are clinical placement, which is implemented in years 3 and 4 of the study programme. The amount of clinical placement implemented is sufficient for starting professional activity in occupational therapy in accordance with the profession standard for an occupational therapist<sup>[1]</sup>. The scope and content of clinical placement in accordance with the clinical placement programme are implemented as a sequential process "Clinical Placement in Somatic Medicine I", "Clinical Placement in Somatic Medicine II", "Clinical Placement in Psychiatry" and "Clinical Placement for Persons with Mental Retardation" to prepare students for independent professional activity in occupational therapy in different practice contexts. General education study courses amount to a total of 20 CPs / 30 ECTS, which include study courses in social sciences and humanities. 12 CP / 18 ECTS are allocated to the national degree examination, incl. writing and defence of a bachelor's thesis in the 4<sup>th</sup> year of studies, but other 122 CP / 183 ECTS are allocated to general education, industry-specific theoretical, information technology, professional specialisation and free elective study courses. Industry-specific theoretical basic courses and information technology courses amount to 36 CP / 54 ECTS. They include general basic courses in life sciences such as "Biology", "Anatomy", "Physiology", which provide comprehensive knowledge, skills and abilities, which are necessary for mastering professional specialisation courses in occupational therapy. Industry-specific professional specialisation courses amount to 60 CP / 90 ECTS and provide students with in-depth studies for mastering the occupational therapist's profession, provide special knowledge, skills and competences in the profession, in accordance with the profession standard for an Occupational Therapist. Industry-specific professional specialisation courses are learned in sequence and complement one another so that students can use the knowledge and skills obtained in clinical placement at the end of the 3<sup>rd</sup> year of studies, for example, study courses "Somatic Diseases", "Hand Splinting", "System of Circulation of Technical Aids", etc. 6 CP / 9 ECTS in the study programme "Occupational Therapy" are elective study courses of the Bachelor's study programme, which are offered in the last year of studies. Compulsory elective study courses are also offered in the last year of studies, which provide students with the possibility to deepen their knowledge and skills in their area of interest in occupational therapy.

Study courses of the professional Bachelor's study programme have been created and are constantly being improved in accordance with the occupational therapist's profession standard in Latvia, as well as the WFOT (World Federation of Occupational Therapy) Minimum Standards for the Education of Occupational Therapists, ENOTHE (European Network of Occupational Therapy Higher Education) recommendations for the study programme harmonisation project in Europe. Mapping of

the study programme has been performed in accordance with the new occupational therapist's profession standard approved in 2021. The learning outcomes are clearly formulated for each study course. Students have access to study course descriptions of the study programme, which define the aim of the course, the necessary prerequisites, content, as well as test methods and outcomes of the study process – what knowledge, skills and competences are acquired by students as a result of learning the study courses, which are freely available on the RSU website [www.rsu.lv](http://www.rsu.lv). Additional information for students regarding the content and expected outcomes of the study course, information regarding the topics of lectures, practical classes and seminars, a list of mandatory and recommended readings and requirements for the mastering of the study course are offered in the study course description, which is available in e-learning. The content of the study programme is regularly improved and the descriptions of study courses, the content of lectures and classes are reviewed every year, including the latest scientific data and supplementing the recommended readings for students. The new occupational therapist's profession standard has been in force since 15 December 2021 and mapping of the study programme has been performed in accordance with it.

To improve the process of the national degree examination and objectivity in assessing the theoretical part of the examination, the format of the theoretical part of the national degree examination was changed from an oral examination to a written examination in academic year 2016/2017, which is a test with multiple choice questions – 100 questions including different subjects of the study programme. The students and the National Examination Board have appreciated the changes introduced. Due to the *COVID-19* pandemic, there was a rapid shift to the use of the e-environment using the *Respondus Monitor* programme. Due to the *COVID-19* pandemic restrictions, the practical part of the national degree examination had to be transferred from the medical institution environment and e-environment for two years, but since academic year 2021/2022, the practical part of the national degree examination has been organised on site in a medical treatment institution with the participation of patients in the examination, while the theoretical part of the national degree examination remained in the e-environment using the *Respondus Monitor* programme for ensuring academic integrity. Every year, 20% of questions of the theoretical part are replaced by new developments in the field.

Students choose topic for their Bachelor's thesis according to the chosen field of professional activity, the selected topics are up to date, the results obtained can be practically used and make their contribution to the field of occupational therapy and rehabilitation. Students regularly participate in conferences organised by the Latvian Association of Occupational Therapists, where they inform field practitioners about the latest developments in research. Cooperation between the study programme and the professional association in translation, validation of standardised evaluation instruments in occupational therapy is particularly commendable, as well as students cooperated with practitioners, medical treatment institutions, non-governmental organisations, the field of social services in the process of collecting research data. When writing Bachelor's theses, students and lecturers also cooperated with Latvian start-ups, for example, a prototype for the evaluation section of a digital therapy tool was developed in cooperation with "*Vigo Health*", where a standardised evaluation tool "Canadian Occupational Performance Measure" was integrated. Right now, the start-up has already included the prototype in the digital tool and it is used by "*Vigo Health*" users – patients after a stroke, occupational therapists and other professionals. Graduates of the study programme "Occupational Therapy" participate in conferences organised by the sector with reports (oral reports, poster reports), which arise from Bachelor's thesis research, for example, the annual summer conference of the Latvian Association of Occupational Therapists, the First Latvian National Congress of Rehabilitation Medicine (2019), the Second Latvian National Congress of Rehabilitation Medicine (2021), 9<sup>th</sup> Latvian Congress of Doctors (2022), which demonstrate the high quality of Bachelor's theses in research. In 2019, graduates of the study programme

“Occupational Therapy” Krista Zalcmane and Klinta Epalte participated in the scientific paper competition and won award-winning places (1<sup>st</sup>, 2<sup>nd</sup> place) at the Baltic Congress of Scientific Researchers in Occupational Therapy.

The objective of the study programme and the learning outcomes are closely related and the achievement of results are ensured by the results of study courses which are appropriate and subordinate to the objective of the study programme and learning outcomes (Annex 18.1). The results of both the study programme and study courses shall conform to the standard of the occupational therapist, which indicates the conformity of the study programme with labour market requirements and is reflected in the results of mapping (Annex 18.2). Study courses are planned in logical order and are updated regularly before each academic year in accordance with RSU quality management requirements and taking into account feedback from students and participating teaching staff.

[1] Occupational therapist’s profession standard, available only in Latvian at:  
<https://registri.visc.gov.lv/profizglitiba/dokumenti/standarti/2017/PS-201.pdf>

**3.2.2. In the case of master’s and doctoral study programmes, specify and provide the justification as to whether the degrees are awarded in view of the developments and findings in the field of science or artistic creation. In the case of a doctoral study programme, provide a description of the main research roadmaps and the impact of the study programme on research and other education levels (if applicable).**

**3.2.3. Assessment of the study programme including the study course/ module implementation methods by indicating what the methods are, and how they contribute to the achievement of the learning outcomes of the study courses and the aims of the study programme. In the case of a joint study programme, or in case the study programme is implemented in a foreign language or in the form of distance learning, describe in detail the methods used to deliver such a study programme. Provide an explanation of how the student-centred principles are taken into account in the implementation of the study process.**

At the beginning of study courses information on the aim, content and plan of the study course, intended final assessment and expected study tasks, schedule of interim reports and final reports, assessment criteria is provided. All information is available also in e-learning. During the implementation of study courses, there is exchange of information between students and lecturers, specifying and clarifying the questions that appeared during independent work if necessary, providing additional support and consultations if necessary. In the period since 2016, the teaching and assessment methods used in study courses have been critically evaluated based on the information provided in study course assessments, informal feedback from students and improvement of pedagogical competences of academic staff involved in the implementation. Lecturers participate regularly in the trainings organised by CEG (Centre for Educational Growth), new lecturers participate in the CEG “School of Junior Academics”. During the accreditation period, structured study assignments for students individually and in groups have been reviewed, updated,

clarified and created from scratch, according to the required amount of independent studies. The e-learning environment is constantly being improved, and this is facilitated by the trainings provided by the RSU CEG on the improvement of the e-learning environment, which is also actively used by lecturers of the study programme. The improvement of the e-learning environment was also forced and accelerated by the *COVID-19* pandemic, which was also a positive benefit. The lecturers involved in the programme provide for the study process methodologically, develop methodological materials, as well as continue work on methodological materials in electronic form, which would be available in the RSU e-environment. The number of video lectures available to students has significantly increased in recent years. A particularly rapid increase in the use of new technologies was necessary to ensure remote studies, and we managed to implement them successfully. During *COVID-19*, studies at RSU, including in the study programme "Occupational Therapy", were not interrupted and were implemented in full. Academic staff uses all information and communication technologies available at RSU to communicate with students. These technologies also provide feedback and easy access for administrative and academic staff. When learning study courses, students have access to teaching methodological materials prepared by teaching staff in an e-environment, video clinical cases in study courses "General rehabilitation", "Biopsychosocial approach to palliative care for adults", "Evaluation and Classification of functional restrictions" video lectures with self-assessment tests that stimulate students' own work and self-managed study process, which students can perform at a time convenient to themselves. The majority of the study programme is composed of practical classes during which vocational skills are acquired. This practical part is implemented by working in small groups, thus enabling individual access to students. During the last accreditation period, the use of clinical cases (situational tasks) in occupational therapy vocational study courses, such as "Occupational therapy in paediatrics," "somatic diseases," has been widely implemented and developed, as well as a problem-based learning (PBL) approach mastered by teaching staff under the guidance of Professor Terry Crow (USA), which develops clinical thinking for students and helps achieve the goals and outcomes of study courses.

The total amount of the study programme is 160 credit points / 240 ECTS, where the amount of one credit point / 1,5 ECTS is the student's workload of 40 academic hours. Within one credit point, the amount of contact hours ranges from 30% to 40% for most study courses. The remaining workload is the student's independent work. The description of each study course includes the organisation of independent work, tasks, assessment criteria. The RSU e-environment is used to communicate and inform students, submit independent work, provide feedback. The study programme plan has been created in accordance with the strategy, aims and tasks of RSU. The implementation of the study programme is ensured by the RSU Dean's office of the Faculty of Rehabilitation, the Department of Rehabilitation and other RSU departments. Studies take place in RSU classrooms and RSU clinical learning centres. Clinical placement is implemented in medical treatment institutions, educational institutions, social care centres and in a non-governmental organisation (providers of social services) and the number thereof has increased significantly during the accreditation period, including by providing placement sites in regions.

An essential condition for the functioning of the study programme is the establishment of the programme management and quality assurance system. The quality assurance of the occupational therapy study programme is based on regular analysis and evaluation of the content of study subject programmes in structural units implementing the programme and at Council meetings of Faculty of Rehabilitation, meetings of the Department of Rehabilitation, analysis and control of the study process, which is performed regularly, analysing the content, quality of study subject programmes, results of student surveys and other indicators (student drop-outs, students' academic achievements); ensuring integration of the study process and research work; strategic planning of the study process by analysing strengths and weaknesses and development

opportunities of study courses; cooperation with employers, cooperation with international partners in other European universities (ENOTHE, Nordplus).

The basic forms of programme acquisition assessment are tests and exams. Other forms used are test work, colloquia, tests, practical demonstrations, presentations of independent works. Cumulative assessments are introduced in study courses increasingly more, which make it possible to assess students and provide feedback during the entire semester. Theoretical knowledge, practical skills, attitude and ability to contact with patients, their relatives and colleagues are assessed. Assessment system is being analysed and improved on a regular basis. Opinions of lecturers and students are taken into consideration.

A national degree examination (NDE) consists of a test of theoretical knowledge (test with multiple choice questions) and demonstrations of practical skills (with a patient in the clinical environment) with a total assessment, where the practical part has the biggest share (70%). Access to patients in the clinical environment was limited during the *COVID-19* pandemic, the practical part of the NDE took place in the e-environment. The procedure of the NDE is described in the Procedure of the National Degree Examination which has been coordinated at the meeting of the Quality Council of the study programme, the Council meeting of the Faculty of Rehabilitation and approved by the RSU Council of Deans. The national degree examination is assessed by the National Examination Board, the head and composition of which for the relevant academic year is approved and it works in accordance with regulatory documents of RSU. Representatives of employers and professional associations are involved in the National Examination Board and represent more than 50% of the Board. The chairperson of the National Examination Board is a representative of the employers or a professional association.

During the study process, students get tutorials, they also take place before examinations, as well as when writing course papers and Bachelor's theses. In addition, informative meetings with the head of the study programme, the dean of the Faculty of Rehabilitation are also organised to discuss the topical issues related to the study process.

**3.2.4. If the study programme envisages an internship, describe the internship opportunities offered to students, provision and work organization, including whether the higher education institution/ college helps students to find an internship place. If the study programme is implemented in a foreign language, provide information on how internship opportunities are provided in a foreign language, including for foreign students. To provide analysis and evaluation of the connection of the tasks set for students during the internship included in the study programme with the learning outcomes of the study programme (if applicable).**

Clinical placement is a mandatory part of the study programme, which is organised in accordance with the laws and regulations of the Republic of Latvia and provides for improvement of the skills necessary for the acquisition of professional qualification in a company or organisation outside RSU corresponding to the sector. In the study programme "Occupational Therapy" clinical placement is implemented in the 3<sup>rd</sup> and 4<sup>th</sup> years of studies: in semester 6-8, in the amount of 26 credit points / 39 ECTS: "Clinical Placement in Somatic Medicine I" (6 CP / 9 ECTS), "Clinical Placement in Psychiatry" (8 CP / 12 ECTS), "Clinical Placement in Somatic Medicine II" (8 CP / 12 ECTS), "Clinical Placement for Persons with Mental Retardation" (4 CP / 6 ECTS). Clinical placement is ensured in institutions in accordance with concluded placement agreements – gratuitous and paid agreements.

Clinical placement is ensured in various medical treatment, educational and social care institutions in the country: P.Stradins Clinical University Hospital, Riga East Clinical University Hospital, Children's Clinical University Hospital, 2<sup>nd</sup> Riga Hospital, NRC "Vaivari", SIA "Sanare - KRC Jaunkemeri", Riga Health Centre, NGO "Special Aids Park", NGO "Movement for Independent Life", NGO "Cared Child", 1<sup>st</sup> Riga Basic School Development Centre, 5<sup>th</sup> Riga Basic School Development Centre, Rehabilitation Centre "We are near you", Social Care Centre "Gailezers", Liepājas Piejūras Hospital, etc. Agreements have also been concluded with regional medical treatment institutions and the offer of clinical placement sites for students is gradually being expanded, with particular emphasis on regional availability.

The **aim of clinical placement** is to strengthen student's knowledge acquired previously in the study programme, develop and improve practical skills in working with patients from different age groups in prevention or reduction of functional capacity disorders and acquire competence conforming to the occupational therapist's profession standard in the selected profession.

The organisation of clinical placement takes place in accordance with the placement documents approved in the Council of the Faculty of Rehabilitation: Clinical Placement Regulations, Clinical Placement Programme, Clinical Placement Portfolio, Clinical Placement Assessment, Clinical Case Assessment. The clinical placement programme is reviewed and, if necessary, updated every academic year. Students' knowledge and skills during clinical placement are evaluated in accordance with the placement assessment documentation, as well as the student is required to participate in a clinical placement seminar and report a clinical case analysis according to the clinical case analysis guidelines for a conceptual placement model "Occupational therapist's placement process structure," where the student provides detailed information regarding patient assessment, occupational therapy methods, evaluation of therapy results and follow-up services. The clinical placement supervisor provides a written assessment of the placement stage at each placement site and provides feedback. At the end of clinical placement, the student submits a Placement portfolio and defends the clinical placement.

### **3.2.5. Evaluation and description of the promotion opportunities and the promotion process provided to the students of the doctoral study programme (if applicable).**

### **3.2.6. Analysis and assessment of the topics of the final theses of the students, their relevance in the respective field, including the labour market, and the marks of the final theses.**

Students of the study programme write three course papers (in the 1<sup>st</sup> and 3<sup>rd</sup> academic year) and a Bachelor's thesis. Course papers are written within study courses – "Assistive Technologies and Environmental Accessibility, Course Paper", "Occupational Therapy, Course Paper", "Public Health in Occupational Therapy". Thematic directions of graduation papers of students are defined in accordance with development of the industry and labour market, and the department – the Department of Rehabilitation – implementing study courses within StP. Students choose topics for their Bachelor's theses independently and formulate them together with the StP director and Bachelor's thesis supervisors. The topics of developed Bachelor's theses are up-to-date and in line

with development trends in the sector. Students prepare an application for the topic of their Bachelor's thesis and participate in the pre-defence of the topic and pre-defence of the Bachelor's thesis, receive recommendations for improvement of the paper from the head of the study course "Research Methods II", the Bachelor's thesis supervisor. The submission and defence of the Bachelor's thesis takes place at the end of semester 8. Students receive an assessment for their final paper by successfully defending it – presenting and answering questions of the commission. It should be noted that Bachelor's theses of many students in the accreditation period were assessed as good, very good and excellent. (The themes and assessments of Bachelor's thesis are shown in Annex 22.) The Bachelor's theses, which received a high assessment, are invited to share their research result at conferences of the Latvian Association of Occupational Therapists, RSU Scientific Conference. Students of the study programme also have high international achievements in a competition of students' scientific papers: In academic year 2018/2019, two students of the study programme participated at the Baltic Congress of Scientific Researchers in Occupational Therapy and obtained the 1<sup>st</sup> and 2<sup>nd</sup> places in the competition of scientific papers (supervisors of Bachelor's theses Zane Liepiņa, Zoja Osipova).

During the accreditation period, there have been no Bachelor's theses that were assessed poorly and were not defended.

Students have access to Methodical guidance for writing Bachelor's theses, which provides detailed guidelines for writing and designing a research paper, and is a good support for students, Bachelor's thesis supervisors and reviewers. Bachelor's thesis supervisors are lecturers of the study programme, who have defined their research paper interests or Bachelor's thesis topics, are related to the professional study courses taught. All lecturers of the study programme are involved in writing and review of Bachelor's theses.

### **3.3. Resources and Provision of the Study Programme**

#### **3.3.1. Assessment of the compliance of the resources and provision (study provision, scientific support (if applicable), informative provision (including libraries), material and technical provision, and financial provision) with the conditions for the implementation of the study programme and the learning outcomes to be achieved by providing the respective examples.**

Material and technical resources of the study programme, which are necessary for mastering professional study courses, are available at the RSU Medical Education Technology Centre (METC), which houses the Department of Rehabilitation and has the rooms necessary for learning the study courses implemented by it with respective equipment necessary for learning basic occupational therapy skills at pre-clinical stage: equipment for evaluating functioning – Nine Hole Peg Test, dynamometer, goniometers, RehaCom digital software for evaluation of cognitive functions, technical assistive technologies for self-care, mobility activity training, an adapted hygiene room, a sensory integration room and equipment of making hand splints are available. In academic year 2022/2023, the Department of Rehabilitation created a digital catalogue of resources, which systematises materials and technical resources of the department and optimises cooperation within different study courses and study programmes. The study programme can use the equipment, simulation environment and support of the RSU Medical Education Technology Centre to ensure



simulations in the study process. Every year, when the budget of the Department of Rehabilitation is planned, current needs are identified and material and technical supplies for ensuring the study programme are supplemented in accordance with proposals made by lecturers, head of study courses and the study programme director. For example, in academic year 2022/2023 a pressure management technology was purchased and students master how to use the technology in the study course “The System of Circulation of Technical Aids” to be able to evaluate patients with high risk of bedsores and to recommended appropriate technical assistive technology for prevention of bedsores. The study programme provides students with extensive RSU Library resources, including the library branch located in the Medical Education Technology Centre, which are conveniently available to students and lecturers. The range of electronic resources of the RSU Library is a significant resource: four databases of e-books (*Ebook Academic Collection (EBSCO)*, *Ebook Central (Proquest)*, *AccessMedicine and ClinicalKey*) and ten full-text databases of journals. The full texts of scientific articles in rehabilitation are available in subscribed databases: *Sage Premier 2022 Collection*, *Health Research Premium Collection (ProQuest)*, *MEDLINE Complete (EBSCO)*, *Communication Source (EBSCO)*, *Sociology Source Ultimate (EBSCO)*, *Academic Search Complete (EBSCO)*, *Wiley Online Journals*, *PsycARTICLES (APA)*, *BMJ Journals*, *ClinicalKey journals (Elsevier)*, *Science Direct (Elsevier)*. Four evidence-based medical databases are available *ClinicalKey Clinical Overviews (Elsevier)*, *The Cochrane Library (Wiley)*, *DynaMed (EBSCO)*, *PEN: Practice-based Evidence in Nutrition*. The RSU Library provides advisory support to the lecturers and students of the study programme both in the study process and in research, which is an indispensable resource in the study process and in writing a Bachelor’s thesis, providing the latest scientific information. Librarians regularly inform lecturers about current resources and trial databases, as well as involve lecturers in evaluating the efficiency of newly acquired resources. The study programme has developed successful cooperation with RSU clinical learning centres and students have the opportunity to learn a wide range of technology applications in occupational therapy as part of practical classes, for example, *ArmeoSpring*, *RehaDigit*, *VigoHealth*, *Raphael Smart Glove*, etc. and to try technologies in work with patients.

### **3.3.2. Assessment of the study provision and scientific base support, including the resources provided within the framework of cooperation with other science institutes and higher education institutions (applicable to doctoral study programmes) (if applicable).**

### **3.3.3. Indicate data on the available funding for the corresponding study programme, its funding sources and their use for the development of the study programme. Provide information on the costs per one student within this study programme, indicating the items included in the cost calculation and the percentage distribution of funding between the specified items. The minimum number of students in the study programme in order to ensure the profitability of the study programme (indicating separately the information on each language, type and form of the study programme implementation).**

It is planned to finance the full-time study programme from the state budget and the funds of private and legal persons by setting the tuition fee in accordance with the state budget funding without social security in the amount of EUR 4890 of study year. Discounts on tuition fees are

possible in accordance with internal regulatory documents. The number of students planned to reach in the four years of study of the full-time study programme is 145 students, with 41 students admitted in the first year of studies, and 6 student drop-outs predicted for the second year of studies, and the number of students remaining unchanged in the third and fourth years. Such a number of students is optimal to ensure a high quality study process and so that the study programme can cover implementation and development costs.

The funding is used for staff remuneration, attraction of visiting lecturers, taxes, maintenance of IT infrastructure, purchase of equipment and facilities and expenditure on study visits. In addition to the direct costs of delivering lectures and conducting classes, the study programmes have to cover infrastructure maintenance costs (premises, IT solutions) and costs of other RSU common resources used in the study programmes (Student services, Library, organisation of the study process, grant to the Student Union and other support and administrative functions).

The study programme is implemented by the Department of Rehabilitation of the Faculty of Rehabilitation, Department of Welfare and Social Work Department of Public Health and Epidemiology, as well as Department of Health Psychology and Paedagogy of the Faculty of Public Health and Social Welfare, Department of Anaesthesiology and Intensive Care, Department of Occupational and Environmental Medicine, Department of Paediatric Surgery, Department of Biology and Microbiology, Department of Human Physiology and Biochemistry, Department of Internal Diseases, Department of Neurology and Neurosurgery, Department of Orthopaedics, Department of Paediatrics, Department of Psychiatry and Narcology, Statistics Unit, Department of Clinical Skills and Medical Technology and Department of Morphology of the Faculty of Medicine, Department of Pharmacology of the Faculty of Pharmacy, Dean's office of the Faculty of Communication and Language Centre. Remuneration of academic staff for the first year of the study programme is planned at approximately EUR 78 000.

*Table 2. Cost of the Study Programme*

<b>Title</b>	<b>Outcome with the existing tuition fee</b>
Average revenue per student, EUR	4 660
Average cost per student, EUR	4 623
Academic staff, %	41
Resources of departments, %	3
Other direct expenditure, %	2
Students' clinical training and placement costs, %	1
Scholarship costs, %	5
Ongoing costs, %	6
Overhead costs, %	42

### 3.4. Teaching Staff

**3.4.1. Assessment of the compliance of the qualification of the teaching staff members (academic staff members, visiting professors, visiting associate professors, visiting docents, visiting lecturers, and visiting assistants) involved in the implementation of the study programme with the conditions for the implementation of the study programme and the provisions set out in the respective regulatory enactments. Provide information on how the qualification of the teaching staff members contributes to the achievement of the learning outcomes.**

The qualification of academic staff involved in the implementation of the study programme corresponds to the conditions of implementation of the study programme and the requirements of regulatory enactments, and ensures the achievement of aims and learning outcomes of the study programme and respective study courses, through both practical experience in the work of an occupational therapist and continuous participation in various seminars, projects, studies and training that provide new theoretical and practical knowledge, exchange of experience and opportunity for students to transfer newly acquired knowledge on occupational therapy-related issues. The director of the study programme "Occupational Therapy" has the qualification of an occupational therapist, systematically improves her professional and pedagogical qualification and participates in research projects. The teaching staff involved in the study programme are professors (2), associate professors (2), assistant professors (3), lecturers (4) of RSU departments and assistants (7) from different RSU structural units, and invited lecturers (24) as well. The lecturers involved in the implementation of professional occupational therapy study courses are highly qualified professionals in their area, obtained in-depth knowledge and skills in an occupational therapy field, actively participate in the work of the Latvian Association of Occupational Therapists, leading interest groups of the association (Ināra Lomonovska, Anastasija Oļeškeviča, Lelde Krauze). Lecturers of the study programme get actively involved in international activities that ensure international mobility of lecturers and students, as well as participation in the development of new cooperation projects:

- Ieva Jēkabsons is involved in *Nordplus* networking activities, implementing coordinator's duties, participating in the preparation of applications for intensive training programmes to raise funding and implement programmes;
- the director of the study programme Zane Liepiņa is a representative of the *ENOTHE* networking;
- lecturers Elza Sebre, Zane Liepiņa, Zoja Osipova are involved in intensive training programmes in cooperation with the Artevelde University of Applied Sciences (Belgium), VIVES University of Applied Sciences (Belgium) and FH Joanneum University of Applied Sciences (Austria);

Lecturers of the study programme are involved in the implementation of different projects and research projects implemented by RSU:

- *Erasmus+* project "Skills Tracking System as a Digital Solution for Student-Centred Learning (*Skill Track*)" aimed at developing a pedagogical framework and methodical concept in the context of self-directed learning, using the skills tracking system as a tool to harmonise learning outcomes with labour market needs and reduce non-compliance of skills;
- In cooperation with the *Arcada* University (Finland), a seminar on the use of simulations in

education of functional specialists was organised in Riga in the spring of 2022, which provides for developing simulations in occupational therapy education (development of simulation scenarios) and their integration in the study process;

- In academic year 2018/2019, assoc. prof Signe Tomsone, lecturer Zane Liepiņa and students of the study programme participated in the Baltic *Nordplus* project “Age is No Barrier”, within which healthy ageing programmes for seniors were created in cooperation with a senior organisation;
- prof. Signe Tomsone, lecturer Lolita Cibule, lecturer Zane Liepiņa – European Social Fund project “Creation and implementation of a functioning evaluation system at “VSIA NRC Vaivari” and research of availability and use of assistive technology (technical aids) in Latvia”.

Clinical placement supervisors are highly qualified professional in their area, who are certified occupational therapists entitled to train, who represent different medical treatment, social care, education and social service institutions and are involved in the study process as adjunct lecturers.

To improve the content of the study programme, as well as to introduce innovative methods in the study process, foreign visiting teaching staff and visiting lecturers are involved, and during the accreditation period there were the following lecturers and classes of visiting lecturers in StP provided by Gail Whiteford (Australia), Natascha Castelein (Belgium), Katrina Bannigan (United Kingdom), Filip Dejonckheere (Belgium), Diane van De Steene (Belgium), Marieke Coussens (Belgium), Karin Lilienberg (Estonia).

From 1 January 2017 to 1 October 2022, 27 lecturers of the Baster’s study programme “Occupational Therapy” participated in continuing education activities of the Centre for Educational Growth attending more than 120 training activities of different content. The lecturers of the study programme “Occupational Therapy” spent 2171 academic hours on mastering continuing education activities.

The lecturers participated in the following activities:

- Pedagogical support for students with special needs;
- Creation of animated visual studio materials;
- Reference management tool *EndNote*;
- Remote work of student groups with the *Miro* tool;
- Open access to scientific information;
- Collaboration and Partnership Towards Professional and Sectoral Development: Local, National, Transnational;
- Contextualizing the use of Webinar in Higher Education;
- Creating Engaging and Interactive Classrooms through Active Learning Techniques;
- The *PubMed* database and its tools for searching for scientific publications;
- Possibilities and comparison of *Web of Science* and *Scopus* databases;
- Digital Darwinism – what it means for us each and our institution;
- Teaching in intercultural environments;
- Think tank: How to assess to learn? Creation of electronic tests;
- Drafting of interactive study materials (*H5P*);
- Interactive presentations and real-time feedback in the *Mentimeter* tool;
- How to promote the acquisition of transversal skills relevant to the working environment in the study process;
- How to create effective image and text compositions in teaching materials;
- Potential of conflict for building cooperation;
- Research methodology and statistical processing of data;

- Mediation – wilful and responsible conflict resolution culture at a university;
- Visualization of content in presentations;
- Developing a study course. Formulation and evaluation of learning outcomes;
- Technology-enriched study process;
- Creating videos: complex in a simple and short way and many other continuing education activities.

During the accreditation period, three lecturers of StP “Occupational Therapy” participated in the cycle of continuing education activities of the Centre for Educational Growth “School of Junior Academics”.

When summarising the information on education, continuing education of lecturers of StP “Occupational Therapy”, it has been concluded that all lecturers of professional study courses completed studies in RSU study programme, and in academic year 2022/2023 three lecturers continue studies in a Master’s or doctoral study programme.

Lecturers of the study programme participate with reports in scientific conferences at Latvian and European scale on a regular basis, as well as get actively involved in the work of professional associations, ensuring cooperation between the study programme and the professional association, as well as students are involved in the work of the professional association in activities that are appropriate for students, for example, work in a student sub-group, participation in activities of the World Occupational Therapy Day.

### **3.4.2. Analysis and assessment of the changes to the composition of the teaching staff over the reporting period and their impact on the study quality.**

The composition of lecturers has stabilised in the accreditation period and new lecturers were involved in the study process after they obtained a Master’s degree Zoja Osipova, Klinta Epalte, Elza Sebre, Linda Celmiņa- Ķeze, Zane Rožkalne, Olga Kožinova, Ināra Lomonovska, Didzis Rozenbergs. They are involved in the implementation of professional study courses, in the implementation of study courses “Research Methods II” and writing of a Bachelor’s thesis. Two lecturers Agnese Kārklīņa, Līga Savicka were attracted for the implementation of professional study courses, who continue with doctoral studies after obtaining their Master’s degree and make their contribution to providing professional study courses “General Rehabilitation”, “Somatic Diseases”, “Geriatrics and Gerontology in Occupational Therapy”. In 2021, lecturer Rūdolfs Cešeiko successfully completed doctoral studies in RSU programme “Medicine”, defended a doctoral thesis and is involved in the implementation of professional study courses “Occupational Therapy, Course Paper”, “Public Health in Occupational Therapy”.

In academic year 2022/2023, new lecturers were elected to academic positions – assistants Agnese Kārklīņa, Līga Savicka, Zoja Osipova, lecturers Rūdolfs Cešeiko, Zane Liepiņa, lecturer Lolita Cibule was re-elected to academic position. Lecturers of the study programme use the training offered by RSU CEG “School of Junior Academics” to improve their teaching skills – in academic year 2021/2022 – Ieva Jēkabsons, Agnese Kārklīņa, in academic year 2022/2023 – Liene Saukuma. All lecturers of the study programme participated in the training organised by RSU to master digital skills and use different IT solutions in the study process, which was particularly important during the transition to remote studies at the beginning of the COVID-19 pandemic. During the accreditation period, lecturers of the study programme used support of the Boris and Inara Teterev Foundation for modernisation of study courses “Evaluation and Classification of Restrictions of Functional

Capabilities" (Līga Savicka) and development of new innovative study courses "Biopsychosocial Approach in Palliative Care" (Agnese Kārklīņa), which is important support for improving the e-learning environment, modernising the content of study courses and implementing innovative pedagogical methods.

One of the resources of a professional study programme is the involvement of industry experts in the study programme ensuring the implementation of professional study courses, for example, Ināra Lomonovska in the implementation of the study course "Occupational Therapy, Course Paper", Elza Sebre "Occupational Therapy in Public Health", "Occupational Therapy in Paediatrics", Kitija Irbe "Somatic Diseases", Jana Bernadska "Occupational Therapy in Paediatrics", who provide a significant contribution from specified fields of occupational therapy, such as occupational therapy in the school environment, adapted physical activities in occupational therapy, occupational therapy in occupational safety, occupational health and health promotion in the working environment.

During the accreditation period, lecturers of the study programme assoc. prof. Signe Tomsone, lecturer Lolita Cibule, lecturer Zane Liepiņa were involved in research, and from 2018 to 2020 implemented the research project "Situation study regarding the functional assessment systems available in Latvia and abroad, development of a description of the functioning assessment system and educational measures for specialists of participating interest-related groups". Lecturer Klinta Epalte and assistant professor Guna Bērziņa in cooperation with digital technology start-up *Vigo Health* participate in a digital technology research and approbation project, as well as students of the study programme are involved gaining cooperation experience with a start-up and research experience as part of writing a Bachelor's thesis.

**3.4.3. Information on the number of the scientific publications of the academic staff members, involved in the implementation of doctoral study programme, as published during the reporting period by listing the most significant publications published in Scopus or WoS CC indexed journals. As for the social sciences, humanitarian sciences, and the science of art, the scientific publications published in ERIH+ indexed journals or peer-reviewed monographs may be additionally specified. Information on the teaching staff included in the database of experts of the Latvian Council of Science in the relevant field of science (total number, name of the lecturer, field of science in which the teaching staff has the status of an expert and expiration date of the Latvian Council of Science expert) (if applicable).**

**3.4.4. Information on the participation of the academic staff, involved in the implementation of the doctoral study programme, in scientific projects as project managers or prime contractors/ subproject managers/ leading researchers by specifying the name of the relevant project, as well as the source and the amount of the funding. Provide information on the reporting period (if applicable).**

**3.4.5. Assessment of the cooperation between the teaching staff members by specifying the mechanisms used to promote the cooperation and ensure the interrelation between the study programme and study courses/ modules. Specify also the proportion of the number of the students and the teaching staff within the study programme (at the moment of the submission of the Self-Assessment Report).**

To ensure qualitative implementation of the study programme, cooperation between the lecturers involved in the implementation of study courses is ensured by various measures implemented with the participating structural unit, as well as within the framework of the implementation of each particular study course. The implementation of the study programme is mainly ensured by lecturers of the Department of Rehabilitation, cooperation with lecturers and management of the Department is close and productive: regular meetings of the department are organised, including meetings in a remote format. Prior to the beginning of each semester, the lecturers involved in the implementation of the study course, guided by heads of study courses, examine the planning of the study course and the topical issues related to its implementation. To ensure the interconnection and continuity of study courses, the director of the study programme organises meetings with heads of study courses.

Department meetings of the Faculty of Rehabilitation with participation of lecturers involved in the Department of Rehabilitation are organised several times per semester. During department meetings, lecturers acquire up-to-date information regarding the activities of RSU and the Department of Rehabilitation, as well as meet the lecturers involved in the implementation of various study courses, which evokes an exchange of thoughts among the lecturers. A meeting of directors of the study programme is organised once a semester, which is attended by director of all the study programmes implemented by RSU and current matters related to the work of the study programme are discussed.

The StP director organises regular remote meetings and exchanges of thoughts with clinical placement supervisors. Meetings of the directors of the study programme of the Faculty of Rehabilitation are organised under the leadership of the dean of the Faculty of Rehabilitation, which allow for the discussion of issues common to study programmes of the Faculty: organisation of the study process, implementation of joint study courses, transition to the ECTS system.

The Latvian National Congress of Rehabilitation Medicine (2018, 2022, 2023) organised by RSU and Latvian professional associations of rehabilitation should be mentioned as an important resource, which is a valuable platform for professionals in the field of rehabilitation, including occupational therapists, where lecturers, practitioners, students in the field and lecturers of the study programme are active members of the congress organisation and scientific committee and participants of the congress. Lecturers of the study programme regularly participate in the annual RSU Scientific Conference and Student Scientific Conference, which provides an opportunity for students and lecturers to share information about latest news in research. The developments of the RSU Research Week are integrated in the study process.

# Annexes

III - Description of the Study Programme - 3.1. Indicators Describing the Study Programme		
Sample of the diploma and its supplement to be issued for completing the study programme	24.1_Anx_Sample_Diploma_and_Supplement_PBSP_Occupational_Therapy.pdf	24.1_Diploms_un_pielikums_PBSP_Ergoterapija.pdf
For academic study programmes - Opinion of the Council of Higher Education in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions (if applicable)		
Compliance of the joint study programme with the provisions of the Law on Higher Education Institutions (table) (if applicable)		
Statistics on the students in the reporting period	16_Anx_Statistics_Occupational_Therapy.pdf	16_pielik_Ergoterapija_statistika_lv.pdf
III - Description of the Study Programme - 3.2. The Content of Studies and Implementation Thereof		
Compliance with the study programme with the State Education Standard	17.1_Anx_Compl_with_Nat_Ed_Stand_Occupational_Therapy.pdf	17.1_pielik_Atbalst_valsts_izgl_standartam_Ergoterapija.pdf
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard or the requirements for professional qualification (if applicable)	18.2_Anx_Mapping_StP_to_Profession_Standard_Occupational_Therapy.pdf	18.2_Profesijas_standarta_kartejums_Ergoterapija.pdf
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)	17.2_pielik_Ergoterapija_Atbalstiba_nozares_specifiskajam_regulejumam_ENG.pdf	17.2_pielik_Ergoterapija_Atbalstiba_nozares_specifiskajam_regulejumam_LV.pdf
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	18.1_Anx_Study_Course_Mapping_Occupational_Therapy.pdf	18.1_pielik_Studiju_kursu_kartejums_StP_rezultatu_sasniesanai_PBSP_Ergoterapija.pdf
The curriculum of the study programme (for each type and form of the implementation of the study programme)	19_Anx_Study_Plan_Occupational_Therapy.pdf	19_pielik_StP_planojums_Ergoterapija.pdf
Descriptions of the study courses/ modules	20_Anx_Study_course_description_Occ_Therapy.pdf	20_pielik_Kursu_apr_Ergoterapija.pdf
Description of the organisation of the internship of the students (if applicable)	9_Anx_Organisation_of_student_placement_Occupational_Therapy.pdf	9_pielikums_Prakses_organizacija_Ergoterapija.pdf
III - Description of the Study Programme - 3.4. Teaching Staff		
Confirmation that the academic staff of the doctoral study programme includes not less than five doctors, of which at least three are experts approved by the Latvian Council of Science in the branch or sub-branch of science in which the study programme intends to award a scientific degree (if applicable)		
Confirmation that the academic staff of the academic study programme complies with the requirements specified in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions (if applicable)		



# Nursing Studies (45723)

Study field	<i>Health Care</i>
ProcedureStudyProgram.Name	<i>Nursing Studies</i>
Education classification code	<i>45723</i>
Type of the study programme	<i>Academic master study programme</i>
Name of the study programme director	<i>Agita</i>
Surname of the study programme director	<i>Melbārde-Kelmere</i>
E-mail of the study programme director	<i>agita.melbarde-kelmere@rsu.lv</i>
Title of the study programme director	<i>Dr.med.</i>
Phone of the study programme director	
Goal of the study programme	<i>To develop the professional competence of nurses, the skills in organisation and management of work in healthcare institutions, research and analytical skills as well as pedagogical and communication skills, and the leadership of a medical practitioner.</i>
Tasks of the study programme	<p><i>1. To implement in-depth knowledge acquisition in nursing, organisation of health care and planning and implementation of healthcare education programmes.</i></p> <p><i>2. To develop and deepen nurse management skills to improve care and education for individuals, groups and the community.</i></p> <p><i>3. To develop and enhance scientific research skills.</i></p> <p><i>4. To promote the competitiveness of programme graduates in the changing socio-economic conditions in the local and international labour market.</i></p>

Results of the study programme	<p>1. <i>Able to demonstrate in-depth knowledge of health maintenance and promotion, pedagogy, management and organisational psychology, organisation of work in healthcare institutions and legal aspects.</i></p> <p>2. <i>Able to explain and discuss complex or systemic aspects of health care in a reasoned manner with both specialists and non-specialists, and independently direct the development of own competences.</i></p> <p><i>Able to explain and discuss aspects of the nursing field and professional domain in a reasoned manner with their highly qualified professional knowledge of the nursing profession.</i></p> <p>4. <i>Able to demonstrate in-depth and extensive knowledge and understanding of nursing that provides a basis for creative professional approach and research, including working at the interface of different fields in health care.</i></p> <p>5. <i>Able to organise and lead working groups and take responsibility for the results of working groups and their analysis within the healthcare system.</i></p> <p>6. <i>Able to apply theory, methods and problem-solving skills independently to carry out research activities and highly skilled professional functions.</i></p> <p>7. <i>Able to undertake entrepreneurial activities, innovate and contribute to the creation of new knowledge in the development of methods for professional activity.</i></p> <p>8. <i>Able to use nursing theory, methods and problem-solving skills independently to carry out research activity.</i></p> <p>9. <i>Able to formulate and critically analyse complex scientific and professional problems independently, make and justify decisions, and contribute to the creation of new knowledge in the development of methods for professional activity.</i></p>
Final examination upon the completion of the study programme	Defence of Master's Thesis

## Study programme forms

### Full time studies - 2 years - latvian

Study type and form	Full time studies
Duration in full years	2
Duration in month	0
Language	latvian
Amount (CP)	80

Admission requirements (in English)	<i>Professional bachelor's degree in health care, academic bachelor's degree in health sciences or second-level professional higher education in health care (or equivalent higher education). A bachelor's degree in another subject area or branch of science, provided that the person has previously obtained a professional qualification of a nurse or midwife. For studies in English, a minimum B2 level of proficiency in English. Entrance examination.</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	<i>Master's Degree of Health Sciences in Health Care</i>
Qualification to be obtained (in english)	-

### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007
Liepāja branch of Rīga Stradiņš University	LIEPĀJA	RIŅĶU IELA 24/26, LIEPĀJA, LV-3405

### Full time studies - 2 years - english

Study type and form	<i>Full time studies</i>
Duration in full years	<i>2</i>
Duration in month	<i>0</i>
Language	<i>english</i>
Amount (CP)	<i>80</i>
Admission requirements (in English)	<i>Professional bachelor's degree in health care, academic bachelor's degree in health sciences or second-level professional higher education in health care (or equivalent higher education). A bachelor's degree in another subject area or branch of science, provided that the person has previously obtained a professional qualification of a nurse or midwife. For studies in English, a minimum B2 level of proficiency in English. Entrance examination.</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	<i>Master's Degree of Health Sciences in Health Care</i>
Qualification to be obtained (in english)	-

### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007
Liepāja branch of Rīga Stradiņš University	LIEPĀJA	RIŅĶU IELA 24/26, LIEPĀJA, LV-3405

### 3.1. Indicators Describing the Study Programme

**3.1.1. Description and analysis of changes in the parameters of the study programme made since the issuance of the previous accreditation form of the study field or issuance of the study programme license, if the study programme is not included on the accreditation form of the study field, including changes planned within the evaluation procedure of the study field evaluation procedure.**

Table 1. Changes in parameters of the study programme (StP)

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period	Planned changes within the assessment procedure
1.	Study direction	—	—
2.	Title of StP	—	—
3.	Code according to the Latvian Education Classification	—	—
4.	Head of StP	Agita Melbārde-Kelmere	—
5.	Scientific degree of the Head of StP	Dr. med.	—
6.	Aim of StP	The formulation of the aim of the study programme has been updated coordinating it with the outcomes of study courses and the study programme	—
7.	Tasks of StP	—	—

<b>No.</b>	<b>Parameter</b>	<b>Description and analysis of changes in StP parameters during the accreditation period</b>	<b>Planned changes within the assessment procedure</b>
8.	Learning outcomes to be achieved	The learning outcomes have been supplemented and corrected by mapping study courses, which has allowed programme management to better review the interaction between the competences, knowledge to be learned in individual courses and the relevance of outcomes of the study programme to its aims and objectives	—
9.	Final examination upon the completion of StP	—	—
10.	Type and form of studies	—	—
11.	Duration of implementation	—	—
12.	Language of implementation	—	—

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period	Planned changes within the assessment procedure
13.	Workload of StP (CP)	—	In accordance with amendments to Section 1(8) of the Law on Higher Education Institutions, which entered into force on 11 October 2022, the transition to the European Credit Transfer and Accumulation System will be implemented until 31 December 2024
14.	Admission requirements	—	Admission requirements have been revised and corrected, to reflect that an entrance examination has to be taken.
15.	Degree to be awarded	—	—
16.	Qualification to be awarded	—	—
17.	Place of implementation	The StP is no longer implemented in Daugavpils	—

Table 1 shows that several changes have been made during the accreditation period for the StP. Dr. med. Agita Melbārde-Kelmere has become the program director.

The program's objectives and learning outcomes have been clarified to ensure they are mutually aligned with the results of the study courses, as well as the knowledge, skills, and competencies acquired in the study courses.

During the accreditation period, the program ceased to be implemented in Daugavpils.

Changes in admission requirements are planned, and a transition from the credit point (KP) system to the European Credit Transfer and Accumulation System (ECTS) is also set to be implemented.

**3.1.2. Analysis and assessment of the study programme compliance with the study field. Analysis of the interrelation between the code of the study programme, the degree, professional qualification/professional qualification requirements or the degree and professional qualification to be acquired, the aims, objectives, learning outcomes, and the admission requirements. Description of the duration and scope of the implementation of the study programme (including different options of the study programme implementation) and evaluation of its usefulness.**

The code of the Academic Master's study programme "Nursing Studies" (45723) corresponds to the classification of Education and Training Sectors defined in Annex 2 to Regulations of the Cabinet of Ministers No. 322 "Regulations on the Latvian Education Classification" (available in [Latvian](#), not available in English). The first part of the code "45" refers to academic education (master's degree) that can be pursued after obtaining a bachelor's or professional bachelor's degree. The duration of full-time studies is two years, in accordance with the duration of studies specified in Cabinet Regulation No. 322. Nursing Studies belong to the thematic field of education "Health and Social Welfare", the thematic field of education "Health Care", group of education programmes "Nursing Studies", therefore the final numbers of the StP code are 723. Therefore, a conclusion can be made that StP corresponds to the study direction "Health Care".

The Academic Master's study programme "Nursing Studies" corresponds to Regulations of the Cabinet of Ministers No. 240 "Regulations on the National Standard of Academic Education" and is implemented as full-time, intramural form of studies (80 CP / 120 ECTS, 2-year studies) in Latvian. The study programme is also accredited for implementation in English, therefore the study programme will be implemented in English if there is demand. Upon completion of the Academic Master's study programme "Nursing Studies" the academic degree of the Master of Health Sciences in Health Care is obtained.

The mission of the Academic Master's StP is to promote the development and sustainability of the healthcare sector and nursing practices in Latvia. The title of the StP "Nursing Studies" derives from the general understanding of nursing work as a profession and academic discipline. The programme includes in-depth mastering of knowledge in nursing studies, health care organisation and planning and implementation of health care education programmes, as well as the development and deepening of the nurse leadership skill to improve care and education for individuals, groups and society. The programme prepares nurses with a developed and profound research skill, which promotes competitiveness of graduates of the programme in variable socioeconomic conditions in the local and international labour market. Graduates of StP are able to demonstrate in-depth or extended knowledge and understanding of nursing studies and healthcare, as well as planning and implementation of nursing and other healthcare specialist study programmes, which are in line with the latest discoveries in sectors and professional areas of nursing studies and healthcare and lay the foundation for creative thinking or research, including when working in-between different sectors.

**Aim** of StP: to develop the nurses' professional competence, skills for organization and management of the work of healthcare facilities, analytical and research skills, as well as teaching and communication skills, leadership of medical practitioners.

### Tasks of StP:

- 1) to implement in-depth mastering of knowledge in nursing studies, organisation of healthcare and planning and implementation of health care education programmes;
- 2) to develop and deepen management skills of a nurse to improve care and education for individuals, groups and the community;
- 3) to develop and deepen scientific research skills;
- 4) to increase programme graduates' competitiveness under the changeable socio-economic circumstances in the local and international labour market.

The Master's study programme ensures the totality of knowledge, skills and competence in accordance with the knowledge, skills and competence defined for level 7 of the Latvian education classification frameworks (CM Regulations No. 512, Paragraph 21, 26.08.2014). The formulation of the learning outcomes of the study programme clearly arises from the title, aim and tasks of the programme and corresponds to the degree to be awarded.

The **learning outcomes** are formulated using a student-centred approach, in a structured manner defining the knowledge, skills, competences that the student/graduate is able to use and implement after graduation from the study programme.

1. Able to demonstrate in-depth knowledge in health preservation and promotion, pedagogy, management and organisational psychology, organisation of work of health care institutions and legal aspects.
2. Able to reasonably explain and discuss complicated or systemic aspects of the health care sector with both specialists and non-specialists, to independently drive the improvement of his/her competences.
3. Able to reasonably explain and discuss aspects of the nursing sector and professional area using his/her highly qualified professional knowledge in the nurse's profession.
4. Ability to demonstrate profound and extended knowledge and understanding of nursing studies, which provide a basis for the creative professional approach to research, including when working in-between different fields in health care.
5. Able to organise and lead working groups and undertakes responsibility for the results of working groups and their analysis in the health care system.
6. Independently uses the theory, methods and problem solving skills in order to conduct research and highly qualified professional functions.
7. Able to do business, innovation and make a contribution to the creation of new knowledge in the development of professional activity methods.
8. Able to use theory, methods and problem solving skills independently to carry out research activities.
9. Able to independently formulate and critically analyse complicated scientific and professional problems, adopt and substantiate decisions, make a contribution to the creation of new knowledge in the development of professional activity methods.

The outcomes of the study courses included in the study programme are related to the aim and learning outcomes of StP. This interrelation is clearly shown in the mapping of the study programme. Several study courses correspond to each learning outcome. See Annex 18.1.

Students are enrolled in accordance with the [Admission regulations](#) (Latvian only) approved by the RSU Senate for the respective academic year and external regulatory enactments – Regulations of the Cabinet of Ministers No. 846 "[Regulations Regarding Requirements, Criteria and Procedure for Admission to Study Programmes](#)" adopted on 10 October 2006 (available in Latvian only). RSU



applicants apply electronically on the RSU website (in [Latvian](#) and [English](#)). The admission requirements are directly related to the aim, tasks, and learning outcomes of the study programme.

Enclosed:

Annex 24.1. Model diploma and supplement thereto.

Annex 24.8. Sample study contract.

### **3.1.3. Economic and/ or social substantiation of the study programme, analysis of graduates' employment.**

Nurses, midwives and other health care professionals (health care sector and related fields of sciences) continue their education in the academic Master's study programme "Nursing Studies" after they obtain a Bachelor's degree. The study programme develops research skills of students and promotes their professional growth and intellectual potential, thus ensuring the development of the national economy, health care professionals, also critical evaluation and use of practical knowledge and skills.

The special value of the study programme is the improvement of competences of students, because the labour market needs nurses and midwives having a Master's degree in health sciences, who can undertake management functions in medical institutions, as well as work as lecturers and placement supervisors, thus implementing a targeted health care human resources development policy, as well as by arranging the system of professional improvement and, undeniably, remuneration of health employees. Thus, for instance, potential employers contact the StP director asking for a meeting with Master students, telling about challenges and job opportunities in their field, emphasising that graduates of these programmes are able to drive change in the health care sector, ensuring the transfer of clinical evidence-based knowledge into daily practices, promoting interdisciplinary cooperation and coordinating health care services (the meeting was organised in December 2022).

Therefore, it can be claimed that graduates of the study programme are in demand in the labour market (employed in state, local government and private health care). Employers appreciate the knowledge, skills and competence of the graduates prepared by the university (this is certified by the internationally recognised QS World University Rankings (2022) of providers of services, analysis and reviews in the field of higher education, which has placed RSU among the leading universities of the world for the fourth year in a row <https://www.topuniversities.com/university-rankings/world-university-rankings/2022>).

The aim and tasks of StP are closely related to the development and needs of the nursing science. Nurses are one of the largest professional groups in health care. As evidenced by international studies, nurses with a Master's degree can have a positive effect on the quality of health care services, patient safety, as well as prevent errors in patient care and reduce mortality.<sup>[1]</sup> Added value of Master's degree is that nurses obtain progressive knowledge in research, leadership, management, communication, as well as academic competence, thus ensuring the development of the profession, promoting the availability of people-centred and integrated health care services.<sup>[2]</sup>

StP implements the directions listed in the Public Health Guidelines 2021-2027, while ensuring that the proportion of employed medical practitioners increases, the prestige of the profession increases (which results in an increase in students in nursing programmes). In addition, it should be

mentioned that the respective Master's degree is mentioned as one of the requirements in the job advertisements (head nurse's, chief nurse's, managing nurse's position). Daina Baidekalne, head of the training centre of the Riga East Clinical University Hospital, has also emphasised that in future it is planned to request Master's degree in nursing studies as one of the criteria for working as the head nurse. When progressing up the career ladder, nurses will need to improve their knowledge, complementing it with a variety of transversal skills and specific competences. The labour market requires this knowledge related to innovation, robotisation and digitisation aspects, demand for highly skilled labour is growing. This is also confirmed by the monitoring data of graduates of higher education institutions of the Ministry of Education and Science.<sup>[3]</sup>

Master students note that they are excited by the possibility of working in parallel to Master studies and combining studies and work. This is usually the case in companies in the health care sector, where students often hold administrative and management positions, which is also considered as one of the factors forcing students of the study programme to seek opportunities for additional education, competence improvement and deeper understanding.

Prospects of graduates to be employed are evaluated as good – all continue to work in medical or educational institutions (see Annex 10 “Employment of graduates”). Graduates of the programme are surveyed in person or by phone, cooperation is established with many graduates of the programme – in placement supervision for students of the professional Bachelor's study programme, as well as reading lectures and classes.

StP is implemented in cooperation with employers, professional associations (for example, Pauls Stradins Clinical University Hospital, Riga East Clinical University Hospital, Children's Clinical University Hospital, Liepaja Regional Hospital, Latvian Nurses Association). In cooperation with the Latvian Nurses Association, students have more opportunities to develop their Master's thesis (in terms of dissemination of information, data survey), as well as the presentation of research data is organised at conferences organised by both associations and employers. Employers (hospitals) also organise a presentation of scientific data.

The management of the programme highly appreciates the analysis and evaluation on the study process, its results, the positive and negative sides by students. Due to the relatively limited number of students in the Master's study programme, it is possible to carry out a qualitative evaluation – in each study year, at least three times a year the director of the study programme meets with students to evaluate the last stage of studies and prepare for the next stage, and to answer to questions and comments of students. In discussions, a lot of attention is paid directly to the evaluation of course curriculum, tasks and the evaluation of heads of course. This quality in-depth information that gives a more accurate and constructive idea of what is happening in the programme and what students want. During meetings, it is always reminded about the evaluation of StP courses (which takes place electronically), as well as emphasised that feedback on learning outcomes is important for the improvement of study courses. The information obtained is used to improve the quality of study courses, it is also regularly discussed with the head of the department and lecturers to improve the study process – content, planning, methods, including assessment methods, type of examinations.

Students systematically evaluate the study process in two quantitative surveys:

- 1) each study course is evaluated in detail in an anonymous survey after its completion;
- 2) a survey of graduates evaluates the studies as a whole.

The results of this survey are also discussed in the quality council for nursing studies, which reviews the measures for improvement of study courses.

Cooperation between the department and students in the day-to-day study process also explains to some extent why students are not very active in the RSU's centralised survey of study courses and study programme (since 2020, the share of unfilled questionnaires is more than 50% and the decrease is very small each year, for example, 58% of questionnaires were unfilled in 2020 and 55% in 2021). The issues of improvement of the study process are discussed with students in the day-to-day work, however, the director of the StP and lecturers of courses remind about the importance of these surveys on a regular basis and motivate students to fill out these evaluations, because they help to improve the overall quality of the study programme, taking into account the needs of students. For example, the student survey led to the reorganisation of the study course "Clinical Trials", replacing both the lecturers of the course and making it more attractive for students in terms of subjects, and recruiting a visiting lecturer from the United Kingdom in academic year 2022/2023, who will provide practical advice and reflect the perspective of nursing practices in conducting clinical trials and cooperating with industry representatives. The study course "Leadership and Effective Change Management in Health Care" has changed the topics of the study course in such a way that the course is interesting and modern – it tells about innovations in nursing studies, as well as includes the most topical aspects of the sector – mentoring, supervisions, coaching. In the future, it is planned to attract visiting lecturers who would read classes in English to promote language proficiency in students.

It should be noted that the average assessment of study courses on the 4-point scale over the last 4 years is high – ranging from 3.59 to 3.66 (see Annex 21.1 "Results of the evaluation questionnaire for the professional Bachelor's study programme "Nursing Studies" and study courses"). This data supports the management of the programme and the department in further improvement of the programme and addressing shortcomings. In general, according to survey data, students of the study programme are generally satisfied with studies, including the choice of the study programme and the university. Students are satisfied with the planning of lectures, availability of information. Students are informed about the need to complete evaluation surveys by the department assistant, also by the study programme director and heads of the study courses, however, it should be achieved that students are involved in the evaluation of study courses more actively. The results are analysed once a year, paying attention to the stated shortcomings and provided comments.

However, the director of the study programme receives more information on the study process and assessment, as well as the necessary changes in discussions with students of the study programme. Feedback is provided to students during meetings, when improvements are discussed, recommendations are listened to and implemented, and planned improvements are reported.

The following mechanisms have been introduced to improve cooperation with students in the study programme:

- 1) each semester, every director of the study programme is required to organise several meetings with students;
- 2) students can ask their questions and do it directly to the lecturer (contacts are available in the study course description), director of the study programme, study process manager, heads of departments, dean of the faculty;
- 3) the tasks are formulated when starting study courses, and each lecturer informs about the possibilities of consideration of questions, suggestions, complaints;
- 4) the director of the study programme regularly answers students' questions, they are also discussed at the meetings of the Faculty Council;
- 5) during meetings students are urged to engage in active communication on the study process and content;

6) student suggestions are discussed with their participation and often implemented during the semester.

[1] Aiken, L. H., Sloane, D. M., Bruyneel, L., et al. (2014). Nurse staffing and education and hospital mortality in nine European countries: a retrospective observational study. *The Lancet*. 383:1824–1830.

[2] Public Health Guidelines 2021-2027. <https://www.vestnesis.lv/op/2022/105.4>

[3] Ministry of Education and Science. (2021). *The latest graduate monitoring data are presented*. [https://www.izm.gov.lv/lv/jaunums/prezente-jauna-absolventu-monitoringa-datus?utm\\_source=http%3A%2F%2Fwww.google.com%2F](https://www.izm.gov.lv/lv/jaunums/prezente-jauna-absolventu-monitoringa-datus?utm_source=http%3A%2F%2Fwww.google.com%2F)

**3.1.4. Statistical data on the students of the respective study programme, the dynamics of the number of the students, and the factors affecting the changes to the number of the students. The analysis shall be broken down into different study forms, types, and languages.**

Students highly evaluate the content of the study programme, as well as the proposed work planning is formed in a sound way to correspond to the needs of students (understanding that most of students continue their professional work in a health care organisation) and providing the possibility of full-time studies. Current practical experiences of lecturers and students in the field of health care enrich the content of the study process, offering students examples of daily working life in joint discussions, analyses. The study programme is offered in Liepaja and Riga. In recent years, there have been fewer students from Liepaja, so the groups were united, however, the possibility of creating student groups in Liepaja will be preserved to ensure the development of regions.

Overall, 17 students on average are enrolled in the programme every year. The highest number of enrolled students was in academic year 2017/2018 (27 students enrolled), as well as in academic year 2019/2020 (26 students enrolled). In academic year 2020/2021, 14 Master students started studies in the academic Master's study programme "Nursing Studies", while 19 students started and continued studies in academic year 2022/2023. Every year, the management of the study programme is working on popularising the study programme jointly with employers and during open days telling about it in the mass media and also addressing students of the Bachelor programme. The management of the study programme constantly pays attention to studying the circumstances of academic work and other contextual factors for the purposes of improving studies in such a way that they correspond to the needs of students.

The number of students in the academic Master's study programme is variable (24-39 students). In academic year 2019/2020, 49 students were registered in the Master's study programme: 32 were registered in the first year of studies and 17 in the second year of studies. In academic year 2021/2022, 18 students studied in the first year of studies and 16 students studied in the second year of studies (students on academic leave are included in this count). 20 students registered for the 1<sup>st</sup> year of studies in academic year 2022/2023. It is expected that the increase in the number of students will continue, because many medical institutions mention Master's degree as one of the requirements for managing and administrative positions in their vacancy announcements, as well as nursing studies conferences and development scenarios mention Master's degree as one of preconditions for successful nursing career development. Annex 16 summarises statistical data on

students in the reporting period.

Students of the Master's study programme mainly get state budget funded places, although during the reporting period there were students on private funding, for example, those were 14 students in academic year 2017/2018, 16 students in academic year 2018/2019 and 18 students in academic year 2019/2020. Since academic year 2020/2021, the share of students has reduced, and in academic year 2021/2022 the source of funding for all students was state budget, no-one studied for private funds.

Insignificant drop-outs were observed during studies (1-3 students per study course). This is more often observed at the beginning of studies, when students change their opinion, the workload of students has changed or poor academic achievements are stated. Most of student drop-outs are observed in the 1<sup>st</sup> year of studies (for example, those were 6 students in academic year 2020/2021 and 7 students in academic year 2019/2020). In academic year 2020/2021, 2 Master students were expelled from the academic Master's study programme "Nursing Studies", 3 students – for not being reinstated after an academic leave, 3 students – based on their own wish. It should be noted again that most of students are expelled in the first semester and the main reasons were difficulties to combine studies and work, as well as the change in goals and priorities (decided not to study). A total of 8 students dropped out, which is identical to academic year 2019/2020 (see Annex 16).

To prevent this, students are provided support and individual tutorials, as well as regular meetings are organised with students to discuss the study process, problems and influencing factors.

Students of the study programme have the possibility to use an Erasmus scholarship during studies to go to study to one of the foreign universities, with which RSU concluded Erasmus exchange agreements. The management of the study programme supports such an opportunity, however, as Master studies last only two years, and students often work professionally in parallel and/or do not want to leave the country for a longer period because of their family conditions (it should be noted that the pandemic changed such travel opportunities), the students have not used this mobility opportunity so far.

To increase interest in studies, the StP director and lecturers actively participate in different events, popularising wide opportunities of students and graduates – organise open days, talks with students of the Bachelor's study programme, discussions with employers, support sessions for those who want to study. Thus, for instance, an inspiration seminar for the nurses wishing to study in this study programme was organised in cooperation with the training centre of the Riga East Clinical University Hospital.

At the beginning of summer, the director of the study programme participated in the [Conversation evening](#) organised by RSU (available in Latvian only) to address those, who were potentially interested in the study programme. This was an unprecedented format for attracting students, which was broadcast online.

To stir up an interest of youths at school in the field of care and to provide knowledge enabling pupils to choose their future profession more successfully, in 2022, a work plan for the Academy of New Nurses, which is a non-formal education project aimed at increasing the interest of pupils in the nurse's profession and thus also promote the interest to study in the Master's programme (existing Master students will participate in a training session popularising the nurse's profession and the specifics of this profession). The work plan created for the project will be supplemented, students of the study programme are also planned to be involved in its implementation, there are also plans to promote mobility and cooperation projects.

Enclosed:  
Annex 16. Statistical data on students.

**3.1.5. Substantiation of the development of the joint study programme and description and evaluation of the choice of partner universities, including information on the development and implementation of the joint study programme (if applicable).**

Not applicable.

## **3.2. The Content of Studies and Implementation Thereof**

**3.2.1. Analysis of the content of the study programme. Assessment of the interrelation between the information included in the study courses/ modules, the intended learning outcomes, the set aims and other indicators with the aims of the study course/ module and the aims and intended outcomes of the study programme. Assessment of the relevance of the content of the study courses/ modules and compliance with the needs of the relevant industry, labour market and with the trends in science on how and whether the content of the study courses/ modules is updated in line with the development trends of the relevant industry, labour market, and science.**

In implementing the principle of lifelong learning, the study programme is open for graduates from Bachelor's studies and Master students with a longer practical service record, which is mainly related to work in health care. The Master's study programme has been created to make it possible to implement a full education study cycle, where graduates are entitled to continue with doctoral studies and to constantly improve own knowledge and skills to adapt to professional activity in changeable health sector conditions.

In the period since 2016, the curriculum of the accreditation study programme has been gradually developed following the development trends in the industry and the labour markets, as well as health care and nursing development trends. Novelties and changes in StP relate to changes in curriculum within the framework of study courses – objectives of several study courses have been updated, revised, the content of examinations has been clarified, heads of study courses constantly update the curriculum taught and sources of literature. Lecturers' changes in study course are planned as a flexible module by evaluating different activities every year (both study course evaluation questionnaires and current trends in health care). In line with trends, the course "Leadership and Effective Change Management in Health Care" 2 CP / 3 ECTS was introduced in the study programme.

The changes introduced match researchers' insights about the nursing studies development trends and labour market forecasts. Future forecasts show negative dynamics in the volume of workforce, therefore there is definitely no basis for concern about overproduction of employees. It is just the

opposite.<sup>[1]</sup> For the development of human resources, the plans mention aspects relating to the attraction of professional leaders and researchers in the future, because the demand for employees with leadership, economic and research skills, as well as general understanding of the health care sector keeps growing. In the future, it is planned to improve elective courses for students supplementing them with interdisciplinary courses (the course supply meeting was held on 21.12.2022), it is planned to evaluate and change elective courses.

Many study courses in the curriculum of the programme stimulate students to think, judge and build their projects, papers with a cross-disciplinary orientation. StP “Nursing Studies” is unique because it is interdisciplinary, several groups of branches of sciences are involved in its implementation: medicine, social sciences and law, and other, where students analyse health care processes.

The studies make it possible to develop not only the professional competence (promoting expertise in care work), but also the skills for organisation and management of the work of healthcare facilities, research, analytical skills, as well as teaching and communication skills. The aim of the studies provides that students balance their theoretical preparedness, the depth of their views and judgments by developing a critical analytical vision and are prepared to work creatively, entrepreneurially and innovatively in the diverse health care sector that is so changeable nowadays. Considering current development trends in health care and nursing sciences, it is important that studies focus on developing theoretical understanding, research and analytical skills, and independent and innovative leadership skills. Graduates of the programme will not only be able to respond independently and flexibly to changes in health care, but will also be able to analyse and understand trends and not lose their qualifications.

Academic Master’s StP “Nursing Studies” is a logical next step for a nurse/midwife and other health professionals with a Bachelor’s degree looking to develop their careers, to focus on improving the health care sector, as well as fulfilling their career goals (such as occupying management positions). The Master’s study programme teaches students how to formulate quality strategies for patient care and care work, cooperate with other health care organisations and shape patient care initiatives. Students of this programme, as well as health care professionals who have obtained a Master’s degree, may participate in the training of new nurses, organisation of placement, thus affecting the training of nurses and the placement intervention. This is why the leadership forge of new nurses plays a key role in providing health care and sustaining the economic sector.

The mapping of the outcomes of the StP and study courses allows to state that the StP and study courses correspond to the EQF/LQF Level 7, the requirements set in regulatory enactments and ensure student-centred approach. Mapping results show the interrelation between the information included in the study courses (planning of topics, lectures and classes), the intended aims and learning outcomes and the relation between the aims of the study courses and the aims of the StP and the learning outcomes. Each study course intends to achieve several defined results of the study programme, thus implementing the aim of the study programme (see Annex 18.1). Student should be able to demonstrate their knowledge in health preservation and promotion, pedagogy, and management and organisational psychology, as well as organisation of work of health care institutions and legal aspects. To ensure that this knowledge and competences are learned, the above-mentioned improvements were made to the courses of parts A and B of the study programme.

The study programme ensures the principle of building transversal competences – different knowledge and skills are acquired at different stages of the study plan in different study courses, in order to ensure and strengthen the competences required in research and professional practice. Therefore, study courses are planned in a specific order to ensure sequential and consistent



acquisition of knowledge and its practical use, for example, to provide knowledge and understanding by developing the ability of prospective specialists to synthesise knowledge, to promote active attitudes towards studies – to learn theories and conceptual issues of health care and nursing sciences (such courses are planned for the first and second semesters of the 1<sup>st</sup> year of studies, for example, “Public Law and Record-Keeping”, “Quality Management in Patient Care”, “Topical Problems in Care”, etc.). The skills to use them for carrying out organisational tasks and the understanding of the practical use of different health care instruments to solve certain health problems are also supplemented in the 2<sup>nd</sup> year of studies (in study courses like “Communication and Management of Therapeutic Relationship”, “Planning and Evaluation of Science-Based Prevention Programmes”, “Research Methods”, etc.). The skills acquired enable the use of modern health care approaches, finding one’s way in the international and national regulatory norms of the sector, building and managing a vision for the strategic development of health care departments and systems, arguing and justifying their views on sectoral issues.

StP “Nursing Studies” is implemented in the form of full-time intramural studies (4 semesters) in Latvian. The study programme consists of: A – compulsory, B – compulsory elective, C – free elective parts. During the first three semesters 13 compulsory study courses (group A, 48 CP / 72 ECTS) and six compulsory elective study courses (group B, 12 CP / 18 ECTS), as well as free elective study courses (group C, 6 CP / 9 ECTS) are implemented in the study programme. The last semester is fully devoted to the drafting and defence of the Master’s thesis (20 CP, 30 ECTS), which includes study, evaluation, selection of theoretical material and doing research, as well as statistical processing of the results of the work and defence of the paper. To ensure the planned learning outcomes, the curriculum of the Master’s study programme is made of study courses on nursing sciences, quality management, health care, teaching and research methods, as well as study courses permitting to specialise in individual current health care directions, aspects, sub-branches, and a Master’s thesis.

The learning outcomes of the study programme ensure that after the listed courses are mastered students will be able to demonstrate in-depth or extended knowledge and understanding of the field or professional area – “Clinical Trials”, “Clinical Pharmacology and Management of Pharmacologically Assisted Care”, “Civil and Environmental Protection, First Aid”, “Public Law and Record-Keeping” and other. The students will master the skill to explain with arguments and discuss difficult aspects in courses like “Introduction to Evidence-Based Care”, “Communication and Management of Therapeutic Relationship”, “Leadership and Effective Change Management in Health Care”.

The students will master organisation and team management principles, as well as the analysis of these processes in study courses “Leadership and Effective Change Management in Health Care”, “Project Management in Health Care” and “Planning and Implementation of Healthcare Educational Programmes”.

Students will learn to use the theory, methods and problem solving skills independently in study courses “Professional Occupational Factors and Prevention in Healthcare”, “Research Methods of Care I”, “Basic Statistics”, “Development and Adaptation of Questionnaires in Scientific Research Work”, “Quality Management in Patient Care”, “Planning and Evaluation of Science-Based Prevention Programmes” and some other. As a result of mastering the study courses students will be able to create innovation and make a contribution to the creation of new knowledge in own professional activity.

For the development of research and analytical skills it is envisaged that certain study courses of the study programme give students the necessary ability to independently use theory, communication and research methods and problem-solving skills to perform research activity or



highly qualified professional functions, such as “Development and Presentation of the Master’s Thesis”, “Research Methods in Care II”, “Statistics”. These study courses also develop the capacity to debate in a reasoned way on complex and systemic aspects of the nursing sciences sector or professional field. The study programme develops skills like analytical thinking, development of innovations, complex problem-solving, critical thinking and analysis, creativity, originality, leadership and initiative, as well as flexibility and stress tolerance, system analysis and evaluation. Study courses contain an overview of evidence-based facts and methods, the use of latest educational and research literature and other modern study system elements aimed at studies of medical topics required by society.

When assessing the curriculum of the study programme, it should be said that it is created in line with the sectoral labour market and higher education laws, policy guidelines and current trends. However, due to relatively small number of students the topics of courses and possibilities to choose are not varied. The proportion of theoretical courses is relatively high, since the study programme prepares students for understanding nursing practices and nursing problems, as well as for further doctoral studies, as well as future lecturers and placement supervisors in nursing sciences. When evaluating aim and outcomes of the study programme and aligning them with outcomes of study courses, it should be concluded it has been achieved that all study courses in the study programme form part of the outcomes needed to achieve the aims. As can be seen from the description above, the development strategy of the study programme takes into account the principle of building transversal competences – that is to say, different knowledge and skills are acquired at different stages of the study plan in study courses, in order to ensure and strengthen the competences required in research and professional practice.

Enclosed:

Annex 17.1. Compliance of the study programme with the national educational standard.

Annex 18.1. Mapping of the study courses for the achievement of learning outcomes of the study programme.

Annex 19. Planning of the study programme (for each type and form of the implementation of the study programme).

Annex 20. Description of study courses.

[1] Buerhaus, P. I. (2021). Current Nursing Shortages Could Have Long-Lasting Consequences: Time to Change Our Present Course. *Nursing Economic\$*.

<http://www.nursingeconomics.net/necfiles/2021/SO21/247.pdf>

**3.2.2. In the case of master’s and doctoral study programmes, specify and provide the justification as to whether the degrees are awarded in view of the developments and findings in the field of science or artistic creation. In the case of a doctoral study programme, provide a description of the main research roadmaps and the impact of the study programme on research and other education levels (if applicable).**

StP “Nursing Studies” ensures the development of transversal skills and care concepts, access to

scientific information, promoting interdisciplinary, interinstitutional and international cooperation (see Sub-Section 3.1.3).

Master's degree provides the basis for an academic career also in research. In accordance with CM Regulations No. 322 "Regulations on the Latvian Education Classification" academic education (Master's degree) is implemented after acquiring a Bachelor's or professional Bachelor's degree. In accordance with the Law on Scientific Activity<sup>[1]</sup> in Latvia, persons with a doctor's or master's degree may be elected to the position of a researcher (Section 26(3)).

Master's degree in health care is awarded to the Master's degree candidate after defence the final thesis. The final thesis of Master studies is an independent research work of a student for obtaining the Master's degree (implemented in the 2<sup>nd</sup> year of studies, in semester 3 and 4, total 20 CP / 30 ECTS). A Master's degree – Master of Health Sciences – is awarded in accordance with the thematic groups of education defined in the Latvian Education Classification (CM Regulations No. 240 "Regulations on State Academic Education Standard", adopted on 13.05.2014).

Thematic directions of graduation papers of students are defined in accordance with development of the industry and labour market. In 2020, lecturers of the Department of Nursing and Obstetric Care updated main research directions helping to concentrate resources on the organisation of health care and promotion of health, as well as improvement of the working environment in Latvia, emphasising the main research directions in the field of health care. Students choose topics independently and formulate them together with scientific supervisors of the study programme and the paper, final theses may also be on innovative topics differing from the above-mentioned ones. The final thesis confirms the Master student's ability to conduct research, independently formulate and critically analyse complex scientific and professional problems in the field of health care, the ability to integrate knowledge from different fields and contribute to new knowledge, research or professional development, show understanding and ethical responsibility on the possible impact of scientific results or professional activities on the environment and society.

Writing of a Master's thesis is based on scientific research and scientific contribution to the field of health care. As specified in Regulations of the Cabinet of Ministers No. 240 "Regulations on State Academic Education Standard", a Master's thesis is a research work in a selected field or sub-field of sciences (in this case – in the field of health care), where a Master students has conducted independent research and made science-based conclusions or developed a research-based creative work. These conditions are described in the document "Regulations on Writing and Defence of Qualification Paper, Student's Research Paper, Bachelor's Thesis and Master's Thesis" approved at an RSU Senate meeting.

A Master's study programme includes all the requirements necessary for obtaining a Master's degree and preconditions for starting doctoral studies in the relevant field or sub-field of science (see also sub-section 3.1.1).

[1] Law on Scientific Activity. 14.04.2005 Latvijas Vēstnesis, 70, 05.05.2005,  
<https://likumi.lv/ta/id/107337-zinatniskas-darbibas-likums>

**3.2.3. Assessment of the study programme including the study course/ module implementation methods by indicating what the methods are, and how they contribute to the achievement of the learning outcomes of the study courses and the aims of the study programme. In the case of a joint study programme, or in case the study programme is implemented in a foreign language or in the form of distance learning, describe in detail**

**the methods used to deliver such a study programme. Provide an explanation of how the student-centred principles are taken into account in the implementation of the study process.**

The academic Master's StP "Nursing Studies" is implemented in Riga and RSU Liepāja Branch. The implementation of StP is ensured by the Department of Nursing and Obstetric Care of the Faculty of Public Health and Social Welfare and the Liepāja Branch of RSU (<https://www.rsu.lv/studiju-programma/maszinibas-magistrantura>, in English – [here](#)). For the successful implementation of the study process, there is cooperation with departments of the Faculty of Public Health and Social Welfare and departments of the Faculty of Medicine of RSU – [Department of Public Health and Epidemiology](#), in English – [here](#), [Department of Welfare and Social Work](#), in English – [here](#), [Department of Anaesthesiology and Intensive Care](#), in English – [here](#), [Department of Pharmacology](#), in English – [here](#), [Department of Clinical Skills and Medical Technologies](#), in English – [here](#) and [Statistics Unit](#), in English – [here](#). The StP is discussed at least once a year in the Study Quality Council of StP "Nursing Studies", the Council of the Faculty of Public Health, changes to the StP are approved at the RSU Dean's Council and Senate.

Three representatives of students of the Bachelor's study programme from different years of studies and one graduate studying in Master's StP "Nursing Studies" are approved as members of the Quality Council. Until now, student representatives have actively participated in Quality Council meetings, where there was an opportunity to participate in the improvement of the study process and content. Further communication of the student representative with students is important in order to convey information on the decisions taken at the meetings of the Quality Council.

Each study course has the leading lecturer (head of the study course), who develops and improves the study course being taught. Credit points are awarded for mastering of specific study courses, taking into account the volume of study work necessary for mastering the course. The volume of study work consists of student's work during contact hours and independent work. Different forms and methods are used during contact hours in the auditorium: lectures and seminars, class group or individual work, discussions, situational tasks, study research, development and defence of projects, etc.

StP "Nursing Studies" has comparatively few regular lectures, most of them are recorded as video lectures or are held online. Theoretical studies (lectures) are organised in the format of video lectures.

Since the beginning of the Covid-19 pandemic practical classes are also implemented remotely using interactive group tools (*Zoom, Teams, Miro, OneNote*, etc.). Form, organisation and test of student's independent work forms are determined and monitored by study course supervisor and lecturers involved in the study course implementation. To improve students' independent work, study materials are placed in the e-learning environment. Students demonstrate their independent work skills during placement and writing and defending their Master's theses. Student's independent work is assessed and the score is included in the total study course assessment received at the end of the study course.

In order to promote a student-centred approach, it is important to improve the competence of academic staff, for example, lecturers may apply for Boris Teterev targeted scholarship for modernisation RSU StPs, as well as for Erasmus+ lecturer mobility programmes. Lecturers of the Department of Nursing and Obstetric Care used this opportunity and visited Estonian and Finnish universities in 2021 and 2022, as well as worked on the development joint scientific projects – one

of the projects received Erasmus funding in 2022; work on other projects is still ongoing.

The innovations enriching the study process are mostly related to the extension of experience of lecturers and to the involvement of students in different academic activities.

International cooperation is implemented in several aspects:

- 1) involvement of visiting lecturers in study courses;
- 2) involvement in international cooperation projects;
- 3) mobility of lecturers and students (Erasmus+, participation in conferences).

The curriculum of the programme is constantly improved, taking into account the RSU academic development strategy, European higher education trends, trends in nursing studies, as well as opportunities of lecturers and students (understanding the diversity of needs), promoting the variety and diversity of teaching methods. The conditions of professional activity of nurses and midwives should be emphasised – to continue with the education process, to master new knowledge in non-formal or formal education improving or reconstructing existing knowledge. The academic Master's StP "Nursing Studies" ensures continuity of this education and the development of the nurse's profession. The studies use different knowledge mastering and strengthening methods: demonstration, visualisation of data, practical work, research, discussions and brainstorming methods, essays, reports, situational analyses and self-assessment tests, etc. Professionals from different institutions are invited to teach individual lectures and classes in study courses, for example, University hospital, to promote the unity of theory and practice. In accordance with the aim of the study courses and in implementing student-centred education principle, different teaching methods are used in the study courses: interactive lectures (including discussions, also ensuring reflexions), specification of mastered theoretical knowledge on seminars, analysis of problem situations, preparation and discussion of reports, group work, independent work.

The purpose of teaching methods is to improve the ability of Master students to describe and critically analyse situations and problems, using theoretical knowledge, practical skills and attitudes, to logically assess development of a situation and take decisions to deal with problems, to develop mutual communication skills, to develop the ability to work individually and in a group in cooperation with other healthcare professionals, to develop the skills to discuss and substantiate personal opinion on public, to improve written communication skills. The analysis of cases and problem situations, where students should use and integrate knowledge in several study courses. A great deal of attention is paid to students' independent work, preparing for classes, as well as developing the works defined in the study course. When observing trends in the field of health care and the wish to develop work environment-based forms of study implementation (also based on the point of view expressed in the students' survey on the need to provide a more substantial link between theoretical knowledge and practice), in the Master's StP, in accordance with the requirements of EQF level 7, the content of study courses includes tasks for critical research and analysis of complex professional problems in the field on the base of specific service providers' institutions / organisations. The task of lecturers is to help students organise their independent work, and to provide individual consultations and advice, when needed.

Mastering of the study programme is assessed according to the set aim and tasks of the programme, learning outcomes, as well as aims, tasks and expected outcomes of individual study course programmes. A positive evaluation must be received for the mastering of the study programme. The assessment takes place in accordance with Regulations of the Cabinet of Ministers No. 240 "Regulations on the National Academic Education Standard" and the [Academic Regulations I](#) (in English – [here](#)). To promote student's responsibility and self-guided study process, at the

beginning of study courses information on the objective, content and plan, intended final assessment and study tasks, schedule of interim reports and final reports, assessment criteria is provided. All information is available also in e-studies. During semesters students' knowledge is assessed at seminars, practical work tests, at the end of semesters or study courses those are written examination, the results of which are assessed collegially with participation of one or more lecturers. Students' knowledge and skills are assessed on a continuous basis and the assessment is complex, which encourages students to study systematically throughout the studies.

The implementation of StP contributes to independence of a student, moreover, it always ensures support and management of teaching staff. When mastering the study programme, tutorials are available from lecturers, students also receive feedback from lecturers, who provide advice on the learning or research process. Students are involved in the improvement of the content of study courses, because study courses are evaluated every semester and after the assessment is received the outcomes of the study process are reviewed, improvements are made to study courses (updates to formulations, objectives / outcomes of study courses). Students participate in decision-making bodies (for example, in the work of the study quality or study programme quality council). During meetings with students, their possibilities to affect their study process are discussed to align them with expectations of students and the importance of feedback on study processes is emphasised.

The most important matters being resolved and important for students are:

- organisation, planning of studies, information availability and clarity, e-learning environment;
- communication with lecturers, tutorial times of lecturers;
- perception of the study content, its comprehensibility, clarity and usefulness;
- tasks, requirements, assessment, explanations, assessment criteria of different study papers, planning of examinations;
- passing of academic failures;
- termination and resumption of studies.

The study process is flexible and therefore work can be combined with family life making it possible to study the programme at any age. The study programme includes students who enrolled after graduating from the Bachelor's programme, as well as those who start their studies several years after graduating from the Bachelor's programme. Students of the study programme are of different ages and have active work experience in the field of health care. Video lectures have been introduced in each study course. Lectures are recorded and available (like other study materials) online to all students, making it possible for them to study, repeat the study material at a more convenient time, thus ensuring a student-centred approach.

The aim of the use of various study methods in Master studies is to maximally promote the acquisition of research and cognitive skills, abstract and analytical thinking skills, as well as knowledge and skills used in professional activities. The research approach is integrated into study course topics to promote a student's ability to select and analyse information sources, create and present essays. This approach certainly prepares students for successful development and defence of a Master's thesis. In order to promote the development of students' research competences, students in successive courses, for example, "Research Methods in Care I and II", "Development and Presentation of the Master's Thesis" have the opportunity to analyse and study in depth the problems of their interest in the field. Evidence-based medicine, based on scientific research and meta-analyses used to assess health care information and promote the incorporation of evidence into practice, plays an important role in learning the StP.

Students have a range of opportunities to engage in different activities outside the study process: activities of the Student Union, hackathons and business incubators, possibility, Research

Breakfast, different seminars, conferences organised by RSU. It is also possible to participate in RSU's amateur bands: the dance band or the choir. Graduates can get involved in the Alumni Association.

**3.2.4. If the study programme envisages an internship, describe the internship opportunities offered to students, provision and work organization, including whether the higher education institution/ college helps students to find an internship place. If the study programme is implemented in a foreign language, provide information on how internship opportunities are provided in a foreign language, including for foreign students. To provide analysis and evaluation of the connection of the tasks set for students during the internship included in the study programme with the learning outcomes of the study programme (if applicable).**

Not applicable.

**3.2.5. Evaluation and description of the promotion opportunities and the promotion process provided to the students of the doctoral study programme (if applicable).**

Not applicable.

**3.2.6. Analysis and assessment of the topics of the final theses of the students, their relevance in the respective field, including the labour market, and the marks of the final theses.**

The Master's thesis is a part of the state examination. The requirements to Bachelor's thesis and its assessment at RSU are laid down in the [Regulations on Writing and Defence of Qualification Paper, Student's Research Paper, Bachelor's Thesis and Master's Thesis](#) (approved by the Senate on 22.02. 2022, in English – [here](#)).

Master students are prepared for writing and defence of their Master's thesis in a purposeful way. Research methodology courses, statistical methods are mastered in the StP starting from semester 1, as well as an evidence-based medicine and care approach is integrated in all study courses. At the end of the first year of studies and at the end of semester 3 Master students report on their scientific research work. The development of the Master's thesis shows the theoretical knowledge of the candidate for a Master's degree in nursing studies, the ability to use the mastered learning material, to work independently with scientific literature and research work methods, to analyse data and draw conclusions. A Master's thesis is a student's independent research of a problem in nursing studies and is a mandatory part of the study programme. The achievements of Master studies are reflected in Master student's research. They provide a basis for assessing the research skills and abilities of Master students, confirm the ability to use adequate research methods, skills to process, analyse and interpret the obtained data, as well as the ability to offer innovative

solutions to problems in health care.

A certain amount of independent work is allocated within the StP when Master students develop the substantiation of their research topic and the research programme. Master students readily choose research topics from those offered. However, they can also choose a topic that suits their research interests independently. The topic of the Master's thesis and the scientific supervisor are approved by the Faculty of Public Health and Social Welfare Council at least 6 months before the defence of the thesis.

Defence of Master's theses is carried out by convening a commission for the defence of Master's theses. The commission is composed of the head of the commission representing the health care sector from a body independent from RSU (for example, a representative of the University of Latvia). In accordance with CM Regulations No. 512 "Regulations on the National Standard of the Second Level Professional Higher Education", at least part of the commission are representatives of professional industry organisation (for example, Latvian Nurses Association) or employers, as well as lecturers of the Department of Nursing and Obstetric Care.

The relevance of Master's theses topics in the field is best characterized by the research topic, the chosen type of research and the research questions raised. In recent years, the topics of final theses of students have been mobbing at workplace, stress at work, obstacles to evidence-based nursing practices, which hinder the implementation of evidence-based care, professional self-conception and quality of professional life, as well as the link of incomplete care with organisational aspects of nursing work. Research in nursing studies covers both the organisational aspects of nursing work and the culture of the working environment, the quality of care work and improvements in care work practices. When assessing the topics of graduation papers, it should be noted that they are diverse, students often solve serious challenges in care work and do so in high quality, they reach important conclusions.

Overall, thematic directions of Master's theses can be broken down into several large blocks:

- analysis of health care organisation, workplaces of nurses and midwives, promotion of health and improvement of the health care organisation and working environment;
- analysis of education and technology;
- quality indicators of professional life of nurses and their relation to the work experience, research of the health ecosystem.

Students receive an assessment for their final thesis by successfully defending it – presenting and answering questions of the commission. It should be noted that papers of many students in the period being covered were assessed as excellent (23 papers) and with distinction (6 papers) and have been a valuable contribution to the development of nursing studies. The management of the programme and supervisors of Master's theses work specifically to guarantee the motivation of students and the quality of Master's theses. Only three student papers in the reporting period have been assessed below 7 (good) and there are no poor assessments. The most frequent assessment is 8 (very good, 22 students) and 7 (good, 14 students).

Analysis of assessments in the reporting period by academic years: in academic year 2016/2017 the assessment of Master's theses of 8 students was from 7 to 10, in academic year 2017/2018 the assessment of 9 students was from 6 to 10, in academic year 2018/2019 the assessment of 15 students was from 7 to 10; in academic year 2019/2020 the assessment of 13 students was from 6 to 10; in academic year 2020/2021 the assessment of 13 students was from 6 to 9 and in academic year 2021/2022 the assessment of all 11 students was from 8 to 9.

Such results have been achieved thanks to motivation and study course planning measures, the development of a concept (Research Methods in Care I and II", "Development and Presentation of

the Master's Thesis"), pre-defence discussions, where the planning and quality of work is evaluated. Students are motivated to speak at scientific conferences with poster presentations, readings (Master's theses are presented at RSU conferences and at international conferences, for example, the ICPIIC poster presentation in 2021), as well as cooperation with the Latvian Nurses Association on reading of papers at seminars, as well as with employees is promoted. Thus, for instance, on 26 October 2022, the Pauls Stradins Clinical University Hospital in cooperation with the University of Latvia and Rīga Stradiņš University organised a scientific practical conference, where graduates of these Master's programmes read their theses making their contribution to the development of nursing studies. The conference was actively attended, and its participants highly appreciated it, and therefore it is planned to continue organising such conference in the future.

Enclosed:

Annex 22. Topics of students' graduation papers.

### **3.3. Resources and Provision of the Study Programme**

**3.3.1. Assessment of the compliance of the resources and provision (study provision, scientific support (if applicable), informative provision (including libraries), material and technical provision, and financial provision) with the conditions for the implementation of the study programme and the learning outcomes to be achieved by providing the respective examples.**

The common RSU infrastructure and also the study base formed for the study direction is used for providing the study programme – library resources, study rooms, technical supplies, computers, cameras, internet connection, etc. Specific learning resources are almost entirely provided in e-studies, including descriptions of study courses, information on the development of independent works, tasks and tests, if any, as well as required readings. Educational literature is mostly provided through e-books, e-journals or internet sources – with a view to provide students with the possibility to read on e-devices (however, in some cases teachers specifically ask students to work in the library).

The library provides lecturers and students with access to Latvian and international electronic resources, including in the health care sector. It should be noted that the Statistical Unit, by promoting the scientific activities of RSU students and lecturers, offers consultations on research methodologies, data input, the use of data processing programmes, methods of statistical processing of data, analysis, interpretation and graphic presentation of results.

Every year, funding for purchasing scientific literature for programmes of the health care direction is awarded to the RSU Library in the annual budget; this does not limit the use and added value of scientific literature for students of different StP.

Any lecturer involved in the implementation of StP "Nursing Studies" have the opportunity to propose some literature they consider necessary by filling out the RSU form BK-1(5). Twice a calendar year, lists of scientific literature are drawn up and submitted to the RSU Library and then the scientific literature is purchased. If budget funds are sufficient, additional funding may be



granted to books. Such activities provide access to the latest scientific literature in the sector in printed form. However, it is also important to note that RSU is subscribed to a number of databases (for example, *Scopus*, *Ebrary*, etc.) which also provide industry-relevant literature.

Students actively use the research tools provided by the RSU Psychology Laboratory.

At the beginning of the implementation of each study course, the lecturer re-organises the e-studies website, updating tasks and lists of readings. The lecturer continues to work on the website during the implementation of the study course, using it also for communication with students, notices and answers to questions. In order to ensure deeper integration of the e-environment in the study process, there are plans to develop the diversity of tools offered by the *moodle* environment – to diversify tasks and forms of communication. In addition, several other tools related to providing the study process remotely are available in the RSU e-studies system toolbox making it possible to perform different activities: addition of study materials; a forum for sending information and discussions; submission of students' independent work, with or without checking for plagiarism, when the submission, correction, determining of the originality of content and sending of submitted papers back to students is ensured; interactive videolecture with a recording and a discussion forum; a virtual seminar with an audio or video discussion between all participants; creation of electronic tests; electronic surveys; electronic voting, etc.

Different RSU departments and structural units (Centre for Educational Growth (CEG), Doctoral School, Information Technology Department) offer different continuing education improvement opportunities on different topics, for example, mastering of digital tools, mastering of interactive methods, preparation of scientific articles, information in different databases, platforms for use of references, opportunities provided by different platforms, etc. For example, in academic year 2021/2022, to respond to the rapidly changing study environment, CEG organises training on hybrid studies helping lecturers to understand the combined study process, when lectures and classes should be read to those, who are in the auditorium, and to those, who study remotely.

RSU also organises the Research Breakfast inviting lecturers, students and other interested persons to participate and including different topics. For example, to present the performance of RSU in the national research programme "Life with Covid-19", research data were actively presented at several Research Breakfasts in academic year 2020/2021.

Taking care of mental and physical health of employees, RSU offers to attend the gym, as well as organised sports classes for lecturers at the Faculty of Continuing Education. Covid-19 affected the possibilities to attend sports classes, but the welfare of RSU employees is still a priority. During the Covid-19 pandemic, in cooperation with the [Department of Psychosomatic Medicine and Psychotherapy](#) employees and students were offered to receive consultations for the preservation and improvement of mental and physical health.

Enclosed:

Annex 23.2. Assessment of the informative and methodological provision regarding library resources for the implementation of the Public Health and Social Welfare Faculty study programmes in accordance with the requirements of the guidelines.

Annex 23.3. Assessment of the information and methodological base on IT resources.

### **3.3.2. Assessment of the study provision and scientific base support, including the resources provided within the framework of cooperation with other science institutes and**

**higher education institutions (applicable to doctoral study programmes) (if applicable).**

Not applicable.

**3.3.3. Indicate data on the available funding for the corresponding study programme, its funding sources and their use for the development of the study programme. Provide information on the costs per one student within this study programme, indicating the items included in the cost calculation and the percentage distribution of funding between the specified items. The minimum number of students in the study programme in order to ensure the profitability of the study programme (indicating separately the information on each language, type and form of the study programme implementation).**

Students of StP can study on state budget funded places and for funds of natural or legal persons. Until now, all the state budget funded places in the Master's study programme have been filled.

The StP is planned to be financed from state budget funds and the funds of individuals and legal entities setting the tuition fee in the Latvian flow in accordance with the state budget funding without social security of EUR 7335, in the English flow – EUR 8000 per year of studies. The tuition fee can be subject to discounts in accordance with internal norms and regulations. The number of students planned to be achieved in the Latvian flow in two years of studies is 29 students, enrolling 15 students in the first year, planning a drop-out of 1 student in the second year. Such a number of students is optimal to ensure a high-quality study process and to make the study programme cover its implementation, as well as development costs. Meanwhile, the study programme in the English flow, which lasts two years, will be able to cover implementation and development costs, if a total of 29 students are enrolled, who pay a tuition fee of EUR 8000 per year.

Funding is used for staff remuneration, attraction of visiting lecturers, taxes, maintenance of IT infrastructure, purchase of equipment and devices. In addition to the direct costs of the implementation of lectures and classes, the StP must cover the infrastructure maintenance costs (facilities, IT solutions) and other RSU common resources used in StP (Student Service, Library, organisation of the study process, grant for the Student Union and other support and administrative functions).

StP is implemented by the RSU Faculty of Public Health and Welfare Department of Nursing and Obstetric Care, Department of Health Psychology and Pedagogy, Department of Public Health and Epidemiology and Department of Welfare and Social Work, Faculty of Medicine Statistical Unit and Department of Clinical Skills and Medical Technologies, and Faculty of Rehabilitation Department of Rehabilitation. Remuneration of the academic staff in the first year of the Latvian flow StP is planned to be approximately 26 thousand EUR and approximately 32 thousand EUR in the English flow study programme.

*Table 2. Information on student costs*

**Costs of the study programme in the Latvian flow**

Name	Result with the existing tuition fee
------	--------------------------------------

Average income per student, EUR	7067
Average cost per student, EUR	4154
Academic staff, %	41
Department resources, %	2
Other direct expenditure, %	7
Scholarships, %	9
Fixed costs, %	4
Overheads, %	37

#### **Costs of the study programme in the English flow**

<b>Name</b>	<b>Result with the existing tuition fee</b>
Average income per student, EUR	7407
Average cost per student, EUR	4506
Academic staff, %	48
Department resources, %	2
Fixed costs, %	3
Overheads, %	47

### **3.4. Teaching Staff**

**3.4.1. Assessment of the compliance of the qualification of the teaching staff members (academic staff members, visiting professors, visiting associate professors, visiting docents, visiting lecturers, and visiting assistants) involved in the implementation of the study programme with the conditions for the implementation of the study programme and the provisions set out in the respective regulatory enactments. Provide information on how the qualification of the teaching staff members contributes to the achievement of the learning outcomes.**

The qualification of teaching staff involved in the implementation of the study programme

corresponds to the conditions of implementation of the study programme and the requirements of regulatory enactments, as well as ensures the achievement of aims and learning outcomes of the study programme and respective study courses. Research directions and expertise fields of lecturers are taken into account, most of lecturers engaged in the implementation of the programme, are employees of the RSU Department of Nursing and Obstetric Care. prof. Inga Millere, prof. Ināra Logina, assoc. prof. Oļegs Sabeļņikovs, assoc. prof. Liāna Deklava, assistant professors Olga Fokina, Agita Melbārde-Kelmere, Kristaps Circenis and Rita Konstante participate in the implementation of the study programme. In the study programme, there 16 elected academic staff members. This includes 8 associate professors, 3 professors, 3 associate professors, 1 lecturer, and 1 researcher. Additionally, several staff members are involved in both mandatory and elective study course implementation, including 4 acting lecturers, 1 acting research assistant, and 1 acting assistant. Furthermore, 3 guest lecturers, including 2 instructors and 1 senior instructor, are also participating in the programme's implementation.

The implementation of study courses is ensured also by other RSU structural units:

- Department of Public Health and Epidemiology – study course “Basics of Market Economy and Management”;
- Department of Welfare and Social Work – “Communication and Management of Therapeutic Relationship”;
- Department of Anaesthesiology and Intensive Care – “Pain Medicine”;
- Department of Pharmacology – “Clinical Pharmacology and Management of Pharmacologically Assisted Care”;
- Department of Clinical Skills and Medical Technologies – “Civil and Environmental Protection, First Aid”;
- [Statistical Unit](#) – “Basic Statistics” un “Statistics”.

The teaching staff in the StP is stable. Lecturers have both academic and practical work experience in the field of nursing studies. To promote the achievement of the aim of the study programme and learning outcomes, lecturers with extensive academic and professional experience are involved in teaching of study courses.

- The study course “Leadership and Effective Change Management” is taught by **Agita Melbārde-Kelmere**, who has had long-term cooperation with medical institutions all over Latvia. She was also elected to the board of the Latvian Nurses Association. Since 2021, she has been one of participants of the Centre for Nursing and Midwifery of the World Health Organization. During the reporting period, Agita Melbārde-Kelmere spoke at several seminars organised by the Latvian Nurses Association, the Latvian Dental Assistants Association every year, as well as in 2022, in cooperation with the Riga Medical College of the University of Latvia and P. Stradins Medical College of the University of Latvia, read open lectures at student scientific conferences. The study course “Leadership and Effective Change Management” also includes lecturers whose experience and employment make it possible to include latest news in the field of healthcare. For example, Assistant Professor **Rita Konstante** reads a class on secondary health care infrastructure planning for students. In 2017, the Assistant Professor made a presentation “Hospital planning process; from hospital statistical data to architecture – Norwegian experience” at the conference of the Latvian Dental Assistants Association. **Inita Stūre-Stūriņa**, a coach and a certified supervisor, reads a class on mentoring, supervision and coaching topics. In this way, trends in health care management are updated in the study course.
- Study courses “Research Methods in Care I and II”, “Evidence Based Care” are taught by Assoc. Prof. **Inga Millere**, who has experience in developing research methodology and tools, as well as is actively involved in the scientific committee of the conference during the

RSU Research Week. In 2019, the professor was an adviser to the World Health Organization. Since 2016, Prof. Millere has participated in a cooperation project COST (*Coopération européenne dans le domaine de la recherche scientifique et technique*) CA15208 action “Missed Nursing care: An international and multidimensional problem 2016-2020” and attended meetings of the action committee.

- The study course “Topical Problems in Care” is taught by *Dr. med.* **Kristaps Cirčenis**, who has extensive experience in leading different projects, participating in project management and expertise in EU-funded projects, for example, NuredPlus, as well as Nured.
- The study courses “Public Law and Record-Keeping”, as well as “Quality Management in Patient Care” and “Project Management in Health Care” are taught by **Zane Tauriņa**, who is the leader of the working group in the ESF co-funded project “Improvement of the sectoral qualification system for development of vocational education and quality assurance” for modular programmes in health care for the development of programme curriculum and qualification examinations. The lecturer’s experience in quality management and internal audit organisation should also be noted.
- The Assistant Professor **Anita Kokarēviča** reads the study course “Basics of Market Economy and Management”. The Assistant Professor developed her expertise in the project on competitiveness of companies in external markets in the health care sector, as well as was an administrator of the ESF project of the Faculty of Continuing Education “Continuing education of the staff involved in the health care and health promotion processes for sustainable development of the sector”.
- Professor **Ināra Logina** reads the study course “Pain Medicine” and is a known doctor of medical sciences, neurologist and algologist. Prof. Logina is the Chairperson of the Latvian Association for the Study of Pain, member of the Board of the Latvian Society of Neurologists and member of the Board of the Association of Neuroimmunologists. The Professor is an expert of the Latvian Council of Science (LCS), as well as participated in different LCS and RSU grant projects.
- Assoc. Prof. **Liāna Deklava** reads the study course “Communication and Management of Therapeutic Relationship”, which becomes increasingly topical developing the basic skill of communication in students and implementing individual-centred care. The professor is an LCS expert in the field of medicine, sub-field health care.

Foreign visiting lecturers are also involved in the programme to improve the StP curriculum and introduce innovative methods in mastering study courses – visiting lecturer **Dace Dimza-Džonsa** is involved in the study course “Clinical Trials” – until now, she has worked as a clinical trial business development manager at the National Institute for Health and Care Research (NIHR). In the last 10 years, the visiting lecturer has demonstrated her experience in 150 clinical trials and their supervision in the field of cardiovascular, oncology, diabetes, surgery, emergency aid, renal, respiratory, public health, primary care and other areas. The visiting lecturer **Lolita Baiba Zariņš** should also be mentioned, who participates in the defence commission for Master’s theses at the University Health, Toronto.

In the reporting period 2017, Anita Kokarēviča and Gunta Bēta obtained a doctoral degree. During the reporting period, there have been changes in the academic staff among both full-time lecturers and visiting lecturers. The changes are related to ensuring succession and interaction between generations. Among the acting staff, 2 are pursuing doctoral-level programs, and 3 have earned master's degrees.

The experience and employment of lecturers make it possible to include in study courses latest news in the field of health care, a reflection of the existing situation in the sector. It is therefore guaranteed that studies will be able to provide in-depth and extensive knowledge and

understanding in line with the latest findings (7-Z-001) and will encourage students to focus on research (7-P-005), being able to use theories and methods approbated in nursing studies by carrying out independent studies, and will develop the ability of students to analyse and explain (7-K-002). The lecturers involved in providing theoretical courses, are teachers with long academic experience, who are ready and able to help students in the study process. The lecturers' experience in health care makes it possible for students to integrate evidence based care principles when writing study papers. Thus, for instance, lecturers of the study programme include LCS experts: Liāna Deklava (Health and sport sciences, until 17.06.2023), Līga Mazure (Law, until 06.07.2025), Ināra Logina (Clinical medicine, until 02.02.2025), Inga Millere (Health and sport sciences, until 17.06.2023), Jeļena Koļesņikova (Psychology, until 07.09.2025), Signe Tomsone (Health and sport sciences, until 06.07.2025), Ivars Vanadžinš (Health and sport sciences, until 03.09.2023), Oļegs Sabeļņikovs (Clinical medicine, until 06.07.2025).

Lecturers of the Department of Nursing and Obstetric Care improve their qualifications at the trainings and courses organised by the RSU Centre for Educational Growth – for example, in 2021, Agita Melbārde-Kelmere graduated from the School of Junior Academics, (<https://www.rsu.lv/aktualitates/atklata-rsu-jauno-docetaju-skola>, the article is available in Latvian only) –, and outside RSU (in continuing education/lifelong learning study courses).

Lecturers and teaching staff are welcomed to make more active use of the technologies and training opportunities offered by RSU and are informed of the opportunities to attend educational seminars organised by the RSU Centre for Educational Growth. From 1 January 2017 to 1 October 2022, 22 lecturers of the Master's study programme "Nursing Studies" participated in continuing education activities of the Centre for Educational Growth attending more than 150 training activities of different content. The lecturers of the study programme "Nursing Studies" spent 2823 academic hours on mastering continuing education activities. The lecturers participated in the following activities of the Centre for Educational Growth: Creation of animated visual studio materials; Reference management tool *EndNote*; Remote work of student groups with the *Miro* tool; Creating Engaging and Interactive Classrooms through Active Learning Techniques; The PubMed database and its tools for searching for scientific publications; Digital Darwinism – what it means for us each and our institution; Teaching in intercultural environments; Think tank: how to assess to learn?; Creation of electronic tests; The potential of immersive technologies for effective learning strategies; Interactive presentations and real-time feedback in the *Mentimeter* tool; Improvisation in pedagogical activities; How games activate teaching and learning; How to promote the acquisition of transversal skills relevant to the working environment in the study process; How to create effective image and text compositions in teaching materials; Research methodology and statistical processing of data; Visualization of content in presentations; Technology-enriched study process and many other.

Similarly, information on the possibilities to master various IT tools is actively sent to lecturers on a regular basis by the RSU Information Technology Department. Part of lecturers are actively involved in mastering new skills to provide the content of the course in the e-environment more successfully.

Enclosed:

Annex 24.7. Analysis of the composition of the teaching staff.

### **3.4.2. Analysis and assessment of the changes to the composition of the teaching staff over the reporting period and their impact on the study quality.**

Lecturers, whose qualification and abilities are of high level and assessed over a long period of cooperation, are involved in the realisation of the study direction and programmes. StP is taught by the lecturers, whose qualification corresponds to the conditions of implementation of the study programme and the requirements of regulatory enactments and ensures the achievement of aims and learning outcomes of the study programme and respective study courses.

When evaluating the composition of the teaching staff of the study programme and its development strategy, it should be acknowledged that by exploiting the intellectual and professional potential of department and faculty staff and by raising Erasmus and other project funds, we have managed to find solutions for the improvement of study courses. The academic and scientific potential of the teaching staff is also strengthened. Several lecturers of the study programme completed doctoral studies and/or were involved in the implementation of study courses after obtaining a doctoral degree. The following lecturers with a doctoral degree participate in the implementation of the study programme: Agita Melbārde-Kelmere, Anita Kokarēviča, Gunta Bēta, Ingrīda Trups-Kalne, Liāna Deklava, Līga Mazure, Olga Fokina, Rita Konstante, Ināra Logina, Inga Millere, Kristaps Circenis, Jeļena Koļesņikova, Signe Tomsone, Ivars Vanadziņš, Oļegs Sabeļņikovs – 15 of 27.

In the reporting period of the Department of Nursing and Obstetric Care, one lecturer has been elected (re-elected for the next term), two lecturers were newly elected and three lecturers were re-elected (for the next term). Several lecturers stopped working and focused on clinical work in their main job. In recent year, *Dr. med.* Agita Melbārde-Kelmere and *Dr. med.* Rita Konstante joined the teaching staff. The following lecturers were elected as Assistant Professors in the reporting period: Agita Melbārde-Kelmere, Anita Kokarēviča, Gunta Bēta, Rita Konstante and Kristaps Circenis.

All the mentioned changes are significant and definitely provide benefit to the quality of implementation of the study programme.

Since March 2022, Agita Melbārde-Kelmere has replaced the current programme director Kristaps Circenis.

**3.4.3. Information on the number of the scientific publications of the academic staff members, involved in the implementation of doctoral study programme, as published during the reporting period by listing the most significant publications published in Scopus or WoS CC indexed journals. As for the social sciences, humanitarian sciences, and the science of art, the scientific publications published in ERIH+ indexed journals or peer-reviewed monographs may be additionally specified. Information on the teaching staff included in the database of experts of the Latvian Council of Science in the relevant field of science (total number, name of the lecturer, field of science in which the teaching staff has the status of an expert and expiration date of the Latvian Council of Science expert) (if applicable).**

Not applicable.

**3.4.4. Information on the participation of the academic staff, involved in the implementation of the doctoral study programme, in scientific projects as project**

**managers or prime contractors/ subproject managers/ leading researchers by specifying the name of the relevant project, as well as the source and the amount of the funding. Provide information on the reporting period (if applicable).**

Not applicable.

**3.4.5. Assessment of the cooperation between the teaching staff members by specifying the mechanisms used to promote the cooperation and ensure the interrelation between the study programme and study courses/ modules. Specify also the proportion of the number of the students and the teaching staff within the study programme (at the moment of the submission of the Self-Assessment Report).**

The cooperation of the teaching staff of the StP is implemented at the department meetings and in the Study Quality Council. During the meetings of the Quality Council, lecturers have the opportunity to make proposals for the necessary improvements in the study programme. When planning new study courses (e.g. "Leadership and Effective Change Management in Health Care"), their content and the title of the study course were debated and jointly discussed at the Quality Council meeting. Study courses are improved and the links throughout the entire study process are created as a result of this process.

At meetings of the Department of Nursing and Obstetric Care (usually before the beginning of the academic year, then every six months on a regular basis), lecturers, practitioners and academics share mutual observations about developments in the sector and reflect on how to link study courses effectively with each other.

Mutual feedback seminars on current topics in nursing studies are organised for cooperation of lecturers. There were also meetings organised for lecturers – in 2021, a summer school was organised evaluating the succession of courses of the study programme (working groups were established to evaluate study courses and the content of study courses, to improve quality), innovations, as well as the development of scientific research projects and networking practices was planned.

- The following project was implemented in the reporting period – *OnBoard-Med, Harmonization of on Board Medical Treatment, Occupational Safety and Emergency Skills in Baltic Sea Shipping*, 01.09.2016–30.06.2019, where lecturers Liāna Deklava, Kristaps Circenis, Eva Cela and Velga Sudraba were involved.
- An ETHCO project was started in 2022, with active participation of doc. Agita Melbārde-Kelme and Kristaps Circenis, as well as lecturers Ilona Zariņa and Evija Melbārde.
- In 2021, the networking project *CCA-EUnurse "Cultural Competence's assessment at the Nursing Degree within the European Higher Education Area"* was started with participation of lecturers of the Department of Nursing and Obstetric Care.

In 2022, an Erasmus cooperation project was launched aimed at supporting health care organisations to create an ethically safe atmosphere for both patient and staff, leading to reduced moral discomfort, thereby increasing the ethical safety of the patient and employee in health care, increasing the ethical competence of staff. The project was developed in 2021, while work started in the autumn of 2022, creating an educational online teaching aid consisting of materials on ethics



(topics such as ethical principles, ethical management, mental distress, mental climate and ethical safety) and new techniques for learning ethics through simulations. The project planned for three years is intended for training organisations in the use of this toolkit at workplaces and integrating it into study programmes of universities (project coordinator Agita Melbārde-Kelmere), promoting teacher-to-teacher cooperation and improvement of study courses.

Since 2021, work has been carried out on the preparation of two projects, one of which received Erasmus funding in 2022 (Agita Melbārde-Kelmere and Kristaps Circenis actively worked on the project application), promoting the improvement of the study programme and developing new skills, study courses and cooperation with other European universities.

All lecturers of the department and basically also all the lecturers involved in the implementation of the study programme perform scientific research work in parallel to their pedagogical work. The research insights and examples from such work enrich the study course content making it up-to-date and close to practice. Several members of teaching staff cooperate by jointly creating study courses, supervising papers of students, as well as performing scientific activity.

Publications for several faculties and universities were jointly created within the NorNured project and the national research project:

- Scientific conference of Rīga Stradiņš University (22-23 March 2018) – abstracts “Factors related to the quality of nursing work environment”, authors: S. Lakiša, **Vanadziņš, K. Circenis**, A. Paparde;
- In November 2021, a poster presentation at the congress of the International Nurses Association “The nursing profession public image on feature films in Latvia”; **Melbārde-Kelmere**, I. Kalniņa, A. Gromova, I. Ansule, **I. Zariņa, I. Stūre-Stūriņa**.

In line with the university's strategy and internal procedure, observation work is also performed. Assistant Professor Agita Melbārde-Kelmere observed teaching in study courses of the Bachelor's programme. After a new visiting lecturer was attracted for the study course “Clinical Trials”, the director of the study programme and the head of the study course Agita Melbārde-Kelmere observed teaching of classes on 9 November 2022. The cooperation of the teaching staff is manifested in mutual visits to the lectures and classes (observation of teaching enables the lecturers to gain mutual feedback, discuss relevant issues of the academic work and share the experience).

The ratio of the number of students and teaching staff in the study programme: 34 students and 27 lecturers. The ratio of the number of students and teaching staff is 1.3.

# Annexes

III - Description of the Study Programme - 3.1. Indicators Describing the Study Programme		
Sample of the diploma and its supplement to be issued for completing the study programme	24.1_Anx_diploma and supplement_AMSP Nurs_Stud.pdf	24.1_pielik_Diploms un diploma pielikums_AMSP Maszinibas.pdf
For academic study programmes - Opinion of the Council of Higher Education in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions (if applicable)	AIP_pielik_prasiba_iznemta_no_AL.pdf	AIP_pielik_prasiba_iznemta_no_AL.pdf
Compliance of the joint study programme with the provisions of the Law on Higher Education Institutions (table) (if applicable)		
Statistics on the students in the reporting period	16_Anx_Statistical data_students_AMSP Nurs_Stud.pdf	16_pielik_Statistika_studejosie_AMSP Maszinibas_lv.pdf
III - Description of the Study Programme - 3.2. The Content of Studies and Implementation Thereof		
Compliance with the study programme with the State Education Standard	17.1_Anx_Compl with_Nat_Ed_Standard_AMSP Nurs_Stud.pdf	17.1_pielik_Atb_valsts_izglt_stand_AMSP Maszinibas_lv.pdf
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard or the requirements for professional qualification (if applicable)		
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)		
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	18.1_Anx_St_course_mapping_to_achieve_learn_outcomes_AMSP Nurs_Stud.pdf	18.1_pielik_St_kursu_kartej_stud_rezult_sasn_AMSP Maszinibas_lv.pdf
The curriculum of the study programme (for each type and form of the implementation of the study programme)	19_Anx_STP_plan_AMSP Nurs_Stud.pdf	19_pielik_STP_planojums_PL_AMSP Maszinibas.pdf
Descriptions of the study courses/ modules	20_Anx_Study_course_description_AMSP_Nursing.pdf	20_pielik_Kursu_apr_Maszinibas_AMSP.pdf
Description of the organisation of the internship of the students (if applicable)		
III - Description of the Study Programme - 3.4. Teaching Staff		
Confirmation that the academic staff of the doctoral study programme includes not less than five doctors, of which at least three are experts approved by the Latvian Council of Science in the branch or sub-branch of science in which the study programme intends to award a scientific degree (if applicable)		
Confirmation that the academic staff of the academic study programme complies with the requirements specified in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions (if applicable)	24.7.1_Annex_Cert_compliance_AMSP_Nursing_Akad_staff_AL_55.1.3.pdf	24.7.1_pielik_Apliecinajums_AMSP_Maszinibas_Akad_pers_atbilstiba_AL_55.1.3.edoc

# Medical Massage (41722)

Study field	<i>Health Care</i>
ProcedureStudyProgram.Name	<i>Medical Massage</i>
Education classification code	<i>41722</i>
Type of the study programme	<i>First level professional higher education study programme</i>
Name of the study programme director	<i>Dina</i>
Surname of the study programme director	<i>Berloviene</i>
E-mail of the study programme director	<i>dina.berloviene@rsu.lv</i>
Title of the study programme director	<i>Acting Assistant Professor/Mg. sc.educ.</i>
Phone of the study programme director	
Goal of the study programme	<i>To ensure the possibility to obtain Level 1 professional higher education in accordance with CM Regulations on the national standard for first level professional higher education, to prepare qualified massage therapists, who are able to satisfy public health needs for massage professionals.</i>
Tasks of the study programme	<p><i>To provide students with professional knowledge and skills by developing the ability to use different types of massage independently, to promote improvement of the health and functional condition of patients, quality of life and well-being related to health, observing the norms and requirements of professional ethics;</i></p> <p><i>To promote the development of professional competences of students that meet labour market requirements</i></p>

Results of the study programme	<p><i>Knowledge</i></p> <p>1. Describes the general constitution plan of a person, the correlations between the system of organs and the functioning thereof, as well as possible changes in the case of abnormalities, naming the main investigative methods using medical terminology.</p> <p><i>Skills</i></p> <p>2. Able to plan and organise the working environment, prepares the necessary equipment, materials and aids for carrying out the procedure.</p> <p>3. Able to perform an assessment of the health condition of the customer and prepare for massage informing them of the massage procedures, their progress and impact, evaluating the contraindications of massage for each customer individually.</p> <p>4. Performs classical massage techniques and auxiliary techniques, uses equipment necessary for the work of the massage therapist also in cases of unpredictable changes.</p> <p>5. Able to assess the results of the massage, takes responsibility for the results of their professional activities and improves their professional activity, including in the event of unpredictable changes. Takes part in the development of the field, shows that they understand the place of the profession in the field concerned in a wider social context.</p> <p>6. Complies with labour protection, fire safety and environmental protection requirements, performs infection control measures and provides first aid.</p> <p>7. Complies with the requirements of regulatory enactments in the field of medical treatment, prepares record-keeping, accounting and financial documents necessary for professional activity.</p> <p><i>Competences</i></p> <p>8. Understands different types of massage and is able to choose the appropriate type of massage for the customer, taking into account the health condition of the customer, the required intensity and duration of the procedure.</p> <p>9. Understands and respects professional ethics and confidentiality in communication with the customer, forms a gracious, understanding and professional dialogue with the customer, employers and colleagues.</p>
Final examination upon the completion of the study programme	Qualification paper/ National degree examination

## Study programme forms

**Full time studies - 2 years - latvian**

Study type and form	<i>Full time studies</i>
Duration in full years	2
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	80
Admission requirements (in English)	<i>Secondary education</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>Massage therapist</i>

**Places of implementation**

<b>Place name</b>	<b>City</b>	<b>Address</b>
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007
Liepāja branch of Rīga Stradiņš University	LIEPĀJA	RIŅĶU IELA 24/26, LIEPĀJA, LV-3405

### 3.1. Indicators Describing the Study Programme

**3.1.1. Description and analysis of changes in the parameters of the study programme made since the issuance of the previous accreditation form of the study field or issuance of the study programme license, if the study programme is not included on the accreditation form of the study field, including changes planned within the evaluation procedure of the study field evaluation procedure.**

*Table 1. Changes in StP parameters*

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period (until 2022)	Planned changes within the assessment procedure (after the accreditation)
1.	Study direction	—	—
2.	Title of StP	—	—
3.	Code according to the Latvian Education Classification	—	—
4.	Head of StP	—	—
5.	Scientific degree of the Head of StP	—	—

<b>No.</b>	<b>Parameter</b>	<b>Description and analysis of changes in StP parameters during the accreditation period (until 2022)</b>	<b>Planned changes within the assessment procedure (after the accreditation)</b>
6.	Aim of StP	Updated and formulated in a more targeted way as follows: to ensure the possibility to obtain Level 1 professional higher education in accordance with CM Regulations on the national standard for first level professional higher education, to prepare qualified massage therapists, who are able to satisfy public health needs for massage professionals.	—
7.	Tasks of StP	Structured, sequentially formulated binding and resulting StP tasks.	—
8.	Learning outcomes to be achieved	In accordance with the guidelines specified by AIKA, the learning outcomes of academic year 2022/23 have been revised and properly updated (nine in total).	—
9.	Final examination upon the completion of StP	—	—
10.	Type and form of studies	—	—

<b>No.</b>	<b>Parameter</b>	<b>Description and analysis of changes in StP parameters during the accreditation period (until 2022)</b>	<b>Planned changes within the assessment procedure (after the accreditation)</b>
11.	Duration of implementation	—	—
12.	Language of implementation	—	—
13.	Volume of StP (CP)	—	In accordance with amendments to Section 1(8) of the Law on Higher Education Institutions, which entered into force on 11 October 2022, the transition to the European Credit Transfer and Accumulation System will be implemented until 31 December 2024.
14.	Admission requirements	—	—
15.	Degree to be awarded	—	—
16.	Qualification to be awarded	—	—
17.	Place of implementation	—	—

Table 1 clearly shows that formulations of the aim, tasks and learning outcomes have changed in accordance with the instructions of QAHE.

The aim of the study programme is aligned with the aim of study specified by the partner institution; there are some textual differences, as each partner institution retains the right to be



autonomous in the formulation of the aim.

The tasks of the study programme are aligned with the partner institution, the binding and resulting tasks of the study programme are specified and consecutively formulated among themselves, leaving the right to be autonomous in the wording of the tasks without fragmenting them.

The learning outcomes of the study programme are coordinated and correspond to the outcomes specified by the partner institution, there are differences in their wording; based on guidelines specified by AIKA the learning outcomes for the academic year 2022/23 have been revised and adjusted accordingly (nine in total).

**3.1.2. Analysis and assessment of the study programme compliance with the study field. Analysis of the interrelation between the code of the study programme, the degree, professional qualification/professional qualification requirements or the degree and professional qualification to be acquired, the aims, objectives, learning outcomes, and the admission requirements. Description of the duration and scope of the implementation of the study programme (including different options of the study programme implementation) and evaluation of its usefulness.**

The code of the study programme “Medical Massage” in accordance with the Latvian Education Classification is 41 722. In accordance with the Latvian classification of education, it is level 1 professional higher education (level 4 professional qualification), which is implemented after general or vocational secondary education, which is also included in the admission requirements defined in the study programme. The study programme “Medical Massage” is implemented in an institution of higher education (RSU Liepāja Branch (LB) and RSU Red Cross Medical College (RCMC)) with a duration of studies of two years in the amount of 80 CP / 120 ECTS, which corresponds to provisions of Regulations of the Cabinet of Ministers (CM) No. 322 and is optimal for the achievement of learning outcomes of the study programme. The last three digits of the code 722 are included in the thematic area of education “Health Care”, in the group of education programmes “Medical Services”, which shows the compliance of the study programme with the study direction. The title of the study programme “Medical Massage” is related to the title of the study direction “Health Care” and corresponds to the professional qualification to be obtained – massage therapist. The title of the study programme reflects and accurately shows that in the study process students master classic massage, as well as many other types of massage, incl. massage for various diseases and massage with medical devices.

Studies are intended for interested persons, whose previously obtained education corresponds to the level of general secondary education defined in the Republic of Latvia as certified by the respective document. The criteria have been defined for admission to studies, based on which studies are possible also for state budget funds (three students start such studies every year of studies). The information on admission requirements is published on the RSU website.

Students of study programmes of the first level professional higher education study programme in the direction “Health Care” can compare previously obtained formal education – study courses mastered in other institutions of higher education.

The **aim** of the study programme is to ensure the possibility to obtain Level 1 professional higher

education in accordance with CM Regulations on the national standard for first level professional higher education, to prepare qualified massage therapists, who are able to satisfy public health needs for massage professionals – it follows from Level 5 of the Latvian Qualifications Framework (LQF), European Qualifications Framework (EQF), where formulated knowledge, skills and competences correspond to level 1 professional higher education in accordance with CM Regulations on the national standard for first level professional higher education. The specified competences are taken into account when creating the profession standard for a massage therapist (<https://www.psk.lu.lv/uploads/VOd9CsV5/MasierisPS-149.pdf>). (Available in Latvian only.)

The competences included in the profession standard are related to LQF Level 5 competences. The study programme has been developed based on the profession standard, setting the following **tasks**:

- to provide students with professional knowledge and skills by developing the ability to use different types of massage independently, to promote improvement of the health and functional condition of patients, quality of life and well-being related to health, observing the norms and requirements of professional ethics;
- to promote the development of professional competences of students that meet labour market requirements.

**Learning outcomes** to be achieved:

- describes the general constitution plan of a person, the correlations between the system of organs and the functioning thereof, as well as possible changes in the case of abnormalities, naming the main investigative methods using medical terminology;
- able to plan and organise the working environment, prepares the necessary equipment, materials and aids for carrying out the procedure;
- able to perform an assessment of the health condition of the customer and prepare him or her for massage informing them of the massage procedures, their progress and impact, evaluating the contraindications of massage for each customer individually;
- understands different types of massage and is able to choose the appropriate type of massage for the customer, taking into account the health condition of the customer, the required intensity and duration of the procedure;
- performs classical massage techniques and auxiliary techniques, uses equipment necessary for the work of the massage therapist also in cases of unpredictable changes;
- understands and respects professional ethics and confidentiality in communication with the customer, forms a gracious, understanding and professional dialogue with the customer, employers and colleagues;
- able to assess the results of the massage, takes responsibility for the results of their professional activities and improves their professional activity, including in the event of unpredictable changes; participates in the development of the field, shows that one understands the place of the profession in the specific field in a wider social context;
- complies with labour protection, fire safety and environmental protection requirements, performs infection control measures and provides first aid;
- complies with the requirements of regulatory enactments in the field of medical treatment, prepares record-keeping, accounting and financial documents necessary for professional activity.

The minimum requirements for obtaining a professional qualification for the regulated profession “Massage Therapist” in the field of health care are defined by Paragraph 7.5 of CM Regulations No. 268 of 24 March 2009 “Regulations on the Therapeutic Expertise of Medical Personnel and Students Acquiring the First- or Second-Level Higher Professional Medical Education and the Extent of their

Theoretical and Practical Knowledge”.

When graduating from the study programme, the student obtains a diploma of the first level of professional higher education and the qualification “massage therapist”.

Enclosed:

Annex 24.1. Sample diploma and its supplement.

Annex 24.8. Sample study contract.

### **3.1.3. Economic and/ or social substantiation of the study programme, analysis of graduates' employment.**

The profession of a massage therapist in Europe has changed considerably in recent years. It has become widely recognised and established itself as an independent, qualitative discipline among other physical therapy and rehabilitation professions. The need for the use of different methods in health care increases promoting the process of recovery of patients ([text source](#))

A massage therapist is a medical practitioner who works in health care and rehabilitation institutions, as well as performs work as an individual entrepreneur, using different types of massage in his or her work, contributing to improvement of the patient's health, thus also quality of life. In Latvia, the Medical Treatment Law (2012) provides that a massage therapist is a medical practitioner who needs level 1 vocational higher education. The current status of the study programme is mainly determined by the abovementioned changes – only a person with the appropriate professional qualification, which has been acquired after receiving an education corresponding to the relevant profession, may work as a massage therapist.

There is demand for health care professionals, including massage therapists, in the labour market. The job opportunities of new, professionally prepared specialists in different types of health care institutions constitute the economic basis of the programme.

The Latvian Public Health Guidelines 2021-2027 (<https://www.vestnesis.lv/op/2022/105.4>, available only in Latvian) define five lines of action, of which action line 3 is: “Human-centred and integrated health care”. Latvia has a high morbidity manifesting as back pain and headaches. This has a significant impact on the quality of life and functioning of people. It is therefore necessary to include rehabilitation in the overall integrative health protection strategy, starting from acute and sub-acute rehabilitation to long-term rehabilitation measures, by creating a personalised rehabilitation package for the prevention of consequences of diseases and injuries, for the prevention of complications and for the preservation and development of capacity to work and activities. There is an increasing need for providing multidisciplinary patient care, which also includes complex rehabilitation. The availability of rehabilitation services in Latvia is still insufficient (Latvian Health Guidelines 2021-2027).

Eight action lines are set out in the Liepaja State City and South Kurzeme Development Programme 2022-2027, of which action line 2 “Public Health” includes measures aimed at the development of health care services at all levels, which also envisages ensuring the attraction of human resources.<sup>[1]</sup> A massage therapist as a medical practitioner who fits into a multi-professional team of rehabilitation professionals, can promote access to rehabilitation services for patients of different profiles.

To ensure high-quality preparation of specialists, not only the necessity of the study programme

“Medical Massage” and attraction of specialists to the labour market, but also compliance and quality, based on the profession standard for a massage therapists approved in 2021 are evaluated, by including the study courses necessary in the study programme. For quality assurance, students and graduates provide an assessment of study courses and the programme, thus students contribute to the improvement of the quality of the study programme. The evaluation of the study process takes place both in discussions with the director of the study programme during each study semester and by evaluating anonymous assessments sent electronically by students. Survey results are analysed together with lecturers of study courses, as well as at the meeting of the Quality Council of the study programme “Medical Massage”. The assessment provided by students about placement in health care institutions and massage therapists placement sites provides an insight into the real situation in the labour market and the acquisition of the necessary skills in the study process.

Each year of studies, after the national degree examination in the study programme “Medical Massage”, members of the National Examination Board, including the potential employers involved from the rehabilitation Department of Liepāja Regional Hospital, lecturers of the study course “Classic Massage” and “Special Forms of Massage”, practicing massage therapists, are invited to express their opinions regarding the professional skills of students/prospective massage specialists. This makes it possible to identify possible differences in the professional work of massage therapists in a real working environment and in the performance of the skills to be acquired in the study environment. When these opinions are summarised, the key aspects of students’ professional skills (assessment of the overall health condition of the patient, preparation of the patient and work area for the procedure to be carried out, communication with the patient, observation of ergonomics principles and massage for a specific area of the body), which should be adjusted and improved, are determined. It is assessed positively that the National Examination Board includes several professionals who work in different medical treatment institutions or placement sites. Their recommendations are taken into account to promote the improvement of the quality of the programme.

Based on a review of the data on employment rates of graduates obtained in the country in a centralised way (see Annex 10), it can be seen that as nine graduates of 2018 are employed, the number of graduates employed in 2019 is 19. When looking at the absolute number of graduates of 2018 and 2019, the employment rate is 87.5%, which is evaluated as high. These are the first employment data regarding graduates of the study programme, because the implementation of the study programme started in academic year 2017/2018. More recent data on employment of graduates are currently not available.

After mastering of the study programme “Medical Massage”, graduates have the possibility to fully integrate into the labour market – the responsiveness of rehabilitation centres, hospital rehabilitation departments and physicians’ practices and the opinion that the study programme is up-to-date and necessary for the supplementation of quality health care human resources are an indication of this. Latvia has more than ten rehabilitation centres. Rehabilitation and physical therapy departments are present in all multi-profile medical treatment institutions and regional hospitals where graduates of the RSU Liepāja Branch study programme “Medical Massage” can work. In the Department of Physical Therapy and Rehabilitation of Liepāja Regional Hospital services can be received both outpatiently and in the hospital. It should be noted that health services are provided by a highly qualified rehabilitation team, which also includes massage therapists. The target group is infants, children and adult patients.

Employers, in particular specialists of the Rehabilitation Department of Liepāja Regional Hospital, are also involved in the National Examination Board of the study programme. Having assessed students’ skills, job offers are made to several students. Having responded to the offer, graduates

have started working as massage therapists in Kurzeme region – Liepāja Regional Hospital, Ventspils and Kuldīga Hospitals. Three graduates of the study programme work at the Baltic Rehabilitation Centre. Most of graduates have chosen to work as individual entrepreneurs, opening their practices in the Kurzeme region. The involvement of graduates, currently practising massage therapists, in the implementation of the study programme “Medical Massage” is also important, they are lecturers in the study course “Classic Massage” and placement supervisors, they are in an employment relationship with RSU.

[1] Liepāja State City and South Kurzeme Development Programme 2022-2027. <https://faili.liepaja.lv/Bildes/Dokumenti/Dokumentu-biblioteka/Strat%C4%93%C4%A3ijas-nozaru-pl%C4%81ni/LDK-AP-2027-strategiska-dala-1-redakcija.pdf> (available in Latvian only).

**3.1.4. Statistical data on the students of the respective study programme, the dynamics of the number of the students, and the factors affecting the changes to the number of the students. The analysis shall be broken down into different study forms, types, and languages.**

Having evaluated statistical data on the number of students in the RSU LB study programme “Medical Massage”, it can be seen that the number of persons wishing to study from academic year 2016/2017 to academic year 2021/2022, at the beginning of each year of studies, is rather constant (22 to 29 students are enrolled). The average number of students in an academic year is about 40. Insignificant dynamics in the number of students is observed across study years and courses. The decrease in the number of students in the 2<sup>nd</sup> year of studies is modest, linked to personal motives, including the stability of the economic and financial situation. Expulsion of students due to poor academic achievements (1-4 students per academic year) is explained by poorly considered choice and inability to adapt to the study process, in which the student needs to do independent work. This is illustrated by the fact that the exclusion of students for poor academic achievements occurs mainly in the 1<sup>st</sup> year (see Annex 16). Cases in which students decide to discontinue studies at their own volition are most often related to difficulties in combining studies with work (often students are employed in the labour market on a daily basis), connecting studies with family responsibilities, care for children. To prevent this in advance, the director of the study programme familiarises first year students with the StP plan, tuition fee payment deadlines, expected examinations, as well as invites to read Academic Regulations I, when the year of studies starts. Regular meetings with students take place during study semesters, the StP director answers clarification questions. Students are invited to contact the StP director in person or by e-mail about possible problems, including difficulties in paying tuition fees – individual solutions are sought for each student to help overcome difficulties that affect and hinder the success of studies. The opportunity to take academic leave without fully interrupting the study process is offered.

When analysing the reduction in the number of graduates in academic year 2021/2022, it should be noted that part of students could not continue studies, because they did not fulfil the requirements imposed to restrict the Covid-19 infection at Rīga Stradiņš University ([https://www.rsu.lv/sites/default/files/imce/Dokumenti/noteikumi/kartiba\\_epidemiologiskas\\_prasibas\\_21052021.pdf](https://www.rsu.lv/sites/default/files/imce/Dokumenti/noteikumi/kartiba_epidemiologiskas_prasibas_21052021.pdf)). (Latvian only).

Students also have the opportunity to have placement within Erasmus+ mobility, which students from the RSU LB study programme “Medical Massage” also wanted to use in academic year

2021/2022. There was no placement mobility due to Covid-19 restrictions. In academic year 2022/2023, the mobility of one student of the RSU LB study programme is planned – placement at the Haapsalu Neurological Rehabilitation Centre, Estonia. Erasmus+ placement mobility lasts at least two months as provided for in the StP plan. An eight-week placement is scheduled for semester 4, respectively, the student can plan it as part of mobility.

Erasmus+ general study mobility could be burdensome for students of the StP due to differences in the implementation of the curriculum in other universities and the long mobility period. Programmes similar to the study programme “Medical Massage” are not implemented in EU countries; of course, massage can be learned in other countries, for example, International Career Institute, London, UK; Medix College, Bramton, Canada. Study courses similar to “Massage” are integrated into other study programmes, for example, in the programme “Physiotherapy”, “Cosmetology”. Mastering of study courses using Erasmus+ mobility is intended for a fairly long mobility period, namely, from 3 and 12 months outside Latvia. A large proportion of students who have chosen to study StP “Medical Massage” are students with previously acquired education in specialities not related to the health care sector and are already active in specialities in the labour market. But mobility over a longer period of time involves termination of employment relationships, as well as being away from family. When discussing mobility with students, they admit it would be a good experience, but it is not possible due to personal circumstances (work commitments, pre-school or school age children). In Erasmus+ placement, the period of absence is not so long (two months) and it is possible to implement it closer to Latvia, for example, in Estonia, at the Haapsalu Neurological Rehabilitation Centre, about which the StP director informed on the basis of an experience visit and cooperation with Tartu Health Care College.

Enclosed:

Annex 16. Statistical data on students.

### **3.1.5. Substantiation of the development of the joint study programme and description and evaluation of the choice of partner universities, including information on the development and implementation of the joint study programme (if applicable).**

The choice to create a new programme, which is joint and binding to the two institutions involved (RSU LB and RCMC), was determined by changes to the Medical Treatment Law, the need for the offer of new programmes to expand study opportunities for students of the RSU study direction “Health Care”, as well as labour market requirements. The joint study programme “Medical Massage” provides that it is possible to master the study programme not only in Riga, but also in Liepāja, expanding the possibilities of higher education studies for students in Kurzeme region. On the other hand, by changing their place of residence, students have the possibility not to interrupt their studies, but to continue them, respectively, at the RSU Liepāja Branch or the RSU Red Cross Medical College, and students used this opportunity.

An [agreement](#) (Latvian only) between the Rīga Stradiņš University Liepāja Branch and the Red Cross Medical College on the implementation of a joint study programme was concluded on 27 February 2015. [Agreement on the development of a joint study programme](#) (Latvian only) and implementation was concluded on 28 April 2015 between Rīga Stradiņš University and the Red Cross Medical College.

The study programme has uniform requirements to the implementation of the joint study programme, final examinations, the degree to be obtained in studies and awarding of the professional qualification. The parts of the joint study programme together form a successive joint study programme unified by content, which is approved in the Quality Council of the joint study programme. The joint study programme allows monitoring current developments of the study process and promoting a quality type of studies, involving lecturers of the RSU Liepāja Branch and of the Riga Red Cross Medical College. The agreement provides that the implementation of the content of the study programme is supervised by the **joint Quality Council of the study programme**, while the organisational and administrative issues of the study process are implemented separately by each of the parties in accordance with the documents regulating the study process of each of the parties.

The content of the programme is in line with its aim to ensure the possibility to obtain Level 1 professional higher education in accordance with CM Regulations on the national standard for first level professional higher education, to prepare qualified massage therapists, who are able to satisfy public health needs for massage professionals. Monitoring of the implementation of the study programme and its quality is ensured by the director of the study programme, who evaluates the study process and learning outcomes, analysing the results of student surveys, changes in labour market trends and latest news in the field and in the world. The changes required in the study programme are evaluated and coordinated in the joint Quality Council of the RSU LB and RCMC study programme.

The joint study programme Quality Council ensures an efficient study process in the study programme “Medical Massage”, examines, decides on and approves:

- changes in the thematic planning of the study programme (for example, number of contact hours, proportional distribution of topics to be studied within the scope of a study course, etc.);
- changes in the study programme (replacement of compulsory Part A study courses, updating with new study courses, offer of new study courses in Part C);
- changes in study examination works (changes in the questions of the final examination in a study course, the proportional distribution of questions within the scope of the study course, changes in the content and/or volume of practical tasks, etc.);
- the research directions of students.

Rīga Stradiņš University Liepāja Branch and Rīga Stradiņš University Red Cross Medical College ensure mobility of academic staff and participation in national examination boards.

The joint study programme Quality Council monitors and ensures the quality of studies, prepares recommendations and provides substantial support to directors of the study programme in solving pressing issues. It also monitors the conformity of the content of the study programme with the requirements of the Latvian and EU legal environment, public interests and labour market requirements.

The joint study programme is implemented separately in each of the partner institutions on the basis of a unified study programme plan and in close cooperation within the study quality Council, as well as representatives of both institutions of higher education take part in national qualification exams. It is important that the teaching staff cooperate with each other. This is also facilitated by the fact that the representatives of the teaching staff participate in the Council meetings.

See Annex:

Annex No 4.3. Composition of the quality Council of the study programme “Medical Massage” (Approved at the Council meeting of the Faculty of public Health and Social Welfare of 21 September 2022, minutes No. 5-SVSLF-1/13/2022)

Annex 15. Compliance of the joint study programme with the requirements of the Law on higher Education Institutions.

Enclosed:

Annex 15. Compliance of the joint study programme with the requirements of the Law on Higher Education Institutions.

## **3.2. The Content of Studies and Implementation Thereof**

**3.2.1. Analysis of the content of the study programme. Assessment of the interrelation between the information included in the study courses/ modules, the intended learning outcomes, the set aims and other indicators with the aims of the study course/ module and the aims and intended outcomes of the study programme. Assessment of the relevance of the content of the study courses/ modules and compliance with the needs of the relevant industry, labour market and with the trends in science on how and whether the content of the study courses/ modules is updated in line with the development trends of the relevant industry, labour market, and science.**

The programme plan of StP “Medical Massage” consists of Part A (compulsory courses) 76 CP / 114 ECTS and Part C (free elective courses) 4 CP / 6 ECTS, the total volume is 80 CP / 120 ECTS. Most of Part A courses are related to the implementation of StP in two years of studies, during which all the competences and knowledge indicated in the profession standard for a massage therapist should be mastered.

The supply of Part C courses is the same for all RSU students. Part C courses are offered in study semesters 2 and 4 (2 CP / 3 ECTS each). Considering the professional direction of the study programme “Medical Massage”, potential study courses, which would be recommended to be included in the supply, are evaluated every year. Starting from the beginning of the implementation of the study programme “Medical Massage”, student chose the study course “Aromatherapy” most often. The choice could be related to the use of different essential oils in massage therapist’s practice. The second most frequently chosen course is “Nordic Walking,” which is evaluated positively and related to strengthening students’ physical health capacity, which is also not a minor factor in the practical activity of future and practising massage therapists.

The information included in study courses arises from aims and learning outcomes of study courses,



which, in turn, arise from the aim and learning outcomes of the programme.

The thematic planning of the implementation of the StP has been developed by including general educational, industry-specific and elective study courses, linking the knowledge, skills and competences necessary for professional qualification of a massage therapists, which are specified in the profession standard for a massage therapist, to the learning outcomes to be achieved in the programme. The profession standard for a massage therapist, on the other hand, has been developed on the basis of current labour market requirements. The initial phase of studies (semester 1) includes basic theoretical study courses such as “Anatomy”, “Physiology and Pathophysiology” providing understanding of the structure and functions of the human body and organ systems. In the study course “Medical Terminology in Foreign Languages”, students learn the most common terminology in health care in Latin, English and German. The study courses “Professional Communication and Ethics” and “Public Health and Environmental Protection” provide insights into health care, cooperation between professionals, when establishing professional dialogue and educational work and respecting professional ethics. The content of these study courses in semester 1 is related to StP outcomes: “describes the general constitution plan of a person, the correlations between the system of organs and the functioning thereof, as well as possible changes in the case of abnormalities, naming the main investigative methods using medical terminology”; “understands and respects professional ethics and confidentiality in communication with the customer, forms a gracious, understanding and professional dialogue with the customer, employers and colleagues”.

After the completion of basic study courses, the StP planning further successively includes industry-specific study courses to acquire the professional skills of a massage therapist. The study course “Classic Massage” is implemented in semester of the 1 and 2 of the 1<sup>st</sup> year of studies. Learning knowledge about various types of diseases, on the basis of which a massage therapist can perform assessment of a patient and plan further activities, is implemented in the study course “Clinical Medicine” and study courses “Propaedeutics” and “Foundations of Rehabilitation”. The knowledge, skills and competences obtained in these study courses correspond to one of learning outcomes of the StP: “able to perform an assessment of the health condition of the customer and prepare for massage informing them of the massage procedures, their progress and impact, evaluating the contraindications of massage for each customer individually.”

Massage practices/workplaces should help people with health problems – therefore, the new massage specialist should be able to assess patients’ health condition, recognise different diagnoses, choose the use of rehabilitation methods, including medical massage, in further patient’s health care. The latest trends in medicine, diagnostics, rehabilitation and use of methods based on evidence-based research are evaluated when offering and mastering study courses. Therefore, the competencies of the prepared massage specialists are in line with the requirements of health care and the labour market.

The thematic planning of the study programme in the 2<sup>nd</sup> year of studies includes mastering of different special types of massage in the study course “Special Types of Massage” in the amount of 12 ECTS. The correspondence between the learning outcomes in study courses and the study programme is clearly visible in the mapping of the study programme. The results of the mapping show that industry-specific study courses such as “Classic Massage” (1<sup>st</sup> year of studies) and “Special Types of Massage” (2<sup>nd</sup> year of studies) achieve the following outcomes of the study programme: “understands different types of massage and is able to choose the appropriate type of massage for the customer, taking into account the health condition of the customer, the required intensity and duration of the procedure”; “performs classical massage techniques and auxiliary techniques, uses equipment necessary for the work of the massage therapist also in cases of unpredictable changes”, etc.

The competence to be acquired indicated in the study course descriptions is the ability to perform assessment of the patient's health condition, prepare the patient for massage, evaluate contraindications of massage for each patient individually and understand physician's instructions. It can therefore be concluded that those study courses are indispensable for the implementation of the study programme.

To achieve the learning outcome of the study programme "understands different types of massage and is able to choose the appropriate type of massage for the customer, taking into account the health condition of the customer, the required intensity and duration of the procedure" and to strengthen the students' knowledge, a new study course "Massage for Various Diseases" was introduced into the study programme in the 2<sup>nd</sup> year of studies, which will further be included in the joint study course "Special Types of Massage".

The study courses "Basics of Business" and "Research Methods and Digital Literacy" provide students with competences such as the ability to plan and organise their work in accordance with the requirements of regulatory enactments in the field of medical treatment, working independently or in a team, and to implement the latest evidence-based achievements in the field of health care in their work. The competences to be reached are related to the following outcomes of the StP: "takes part in the development of the field, shows that they understand the place of the profession in the field concerned in a wider social context"; "complies with the requirements of regulatory enactments in the field of medical treatment, prepares record-keeping, accounting and financial documents necessary for professional activity".

To achieve one of the outcomes of StP, namely, "complies with labour protection, fire safety and environmental protection requirements, performs infection control measures and provides first aid", the plan of the study programme includes study courses "Occupational Protection and Ergonomics", "Emergency Medical Care and Civil Defence" and "Public Health and Environmental Protection".

Every year, the head of the study course revises and updates study course descriptions. Changes in content of a study course are approved at the Council meeting of the Faculty of Public Health and Social Welfare. Thus, for instance, in 2019, a decision was made at the Quality Council meeting of the study programme "Medical Massage" to move the study course "Propaedeutics" to semester 2, when anatomy and physiology have already been learned, but the course "Pedagogy" (hereinafter referred to as study course "Professional Communication and Ethics") - to semester 1. To achieve the skills and knowledge of the study course "Prenatal Massage" in the study course "Classic Massage" and to create a new study course "Massage for Various Diseases" (further included in the study course "Special Types of Massage"). Based on the new profession standard (2021), a matter of the necessary changes in the study course plan was raised. The module "Medical Rehabilitation" previously included study courses "Foundations of Rehabilitation" and "Basics of Hydrotherapy". The feasibility of study course "Basics of Hydrotherapy" was reconsidered in the study plan in academic year 2022/2023, because the new profession standard does not request such knowledge, therefore this module will no longer be implemented, but there will be a study course "Foundations of Rehabilitation" of 2 CP / 3 ECTS. The increase in credit points in the particular study course from 1 to 2 CP / 3 ECTS is also provided for by the inclusion of a massage therapists as a medical practitioner in a rehabilitation team, as well as interest of students in the matters related to rehabilitation. Similarly, having evaluated the requirements of the profession standard (2021), the study course "Aesthetic Hardware Massage" was changed to the study course "Massage with Medical Devices", but the study course "Sports and Deep Tissue Massage" was changed to the study course "Sports Massage" (these two courses will be further included in the study course "Special Types of Massage"), as well as other special types of massage were included based on the requirements of the new profession standard (2021).

The analysis provided shows the correlation between the study courses included in the study programme, as well as Section 3.4.5 shows more information about the cooperation between the teaching staff in the implementation of the study courses.

The StP plan provides for making the changes described here starting from academic year 2023/2024 to reduce fragmentation of the study programme. Study course modules will be replaced with study courses with more ECTS, including topics of study courses covered by previous study course modules, as well as the number of ECTS will increase in individual study courses.

Planned study courses:

- “Professional Communication and Ethics”, 4 ECTS (previously – “Professional Communication”, “Professional Ethics”, “Basics of Psychology”, “Pedagogy”);
- “Clinical Medicine”, 10 ECTS (“Internal Diseases”, “Neurology”, “Dermatovenerology”, “General Surgery and Traumatology”, “Pharmacology”);
- “Special Types of Massage”, 12 ECTS (“Massage for Various Diseases”, “Segment Massage”, “Manual Lymphatic Drainage”, “Sports Massage”, “Massage with Medical Devices”);
- “Basics of Business”, 9 ECTS (“Basics of Healthcare and Organisation”; “Record-Keeping”, “Basics of Economics and Business, “Accounting”, “Project Preparation and Management”);
- “Research Methods and Digital Literacy”, 4 ECTS (“Research Methods”, “Information Literacy”);
- “Medical Terminology in Foreign Languages (English, German, Latin)”, 5 ECTS (“Medical Terminology in Russian”, “Medical Terminology in English” and “Medical Terminology in Latin”);
- “Public Health and Environmental Protection”, 3 ECTS (“Environmental Science”, “Public Health”);
- “Anatomy”, 5 ECTS (2 CP);
- “Physiology and Pathophysiology”, 4 ECTS (2 CP);
- “Classic Massage”, 7 ECTS (4 CP).

The information provided about the study programme shows that the requirements of the joint study programme are implemented in their unique, substantially weighted and implemented way, when a uniform study programme jointly created by higher education institutions is implemented in close cooperation with the supervision of the study quality Council and real involvement in addressing various issues, but in physical environment in different regions of Latvia, remote cities in Riga and Liepaja. Although Red cross College of Rīga Stradiņš University is part of RSU, it functions independently, with its own resources, which of course does not exclude that if any of the representation in the implementation of the programme requires support in ensuring the study process, it may be provided. Moreover, taking into account the Education Guidelines of Latvia, it is important that the creation of a joint content programme as a joint study programme does not unnecessarily fragment the offer of education in the higher education environment of Latvia.

Enclosed:

Annex 15. Compliance of joint first level professional study programme “Medical Massage” with the requirements set for the joint study programme

Annex 17.1. Compliance of the study programme with the national educational standard.

Annex 17.2. Compliance of the study programme with the industry-specific regulations.

Annex 18.1. Mapping of the study courses for the achievement of learning outcomes of the study programme.

Annex 18.2. Compliance of the qualification to be acquired upon completion of the study

programme with the professional standard.

Annex 19. Planning of the study programme (for each type and form of the implementation of the study programme).

Annex 20. Description of study courses.

**3.2.2. In the case of master's and doctoral study programmes, specify and provide the justification as to whether the degrees are awarded in view of the developments and findings in the field of science or artistic creation. In the case of a doctoral study programme, provide a description of the main research roadmaps and the impact of the study programme on research and other education levels (if applicable).**

Not applicable.

**3.2.3. Assessment of the study programme including the study course/ module implementation methods by indicating what the methods are, and how they contribute to the achievement of the learning outcomes of the study courses and the aims of the study programme. In the case of a joint study programme, or in case the study programme is implemented in a foreign language or in the form of distance learning, describe in detail the methods used to deliver such a study programme. Provide an explanation of how the student-centred principles are taken into account in the implementation of the study process.**

The study programme is implemented in accordance with an StP curriculum and the study course included therein. A massage therapist is a medical practitioner whose work requires not only professional knowledge and skills, but also the ability to build positive communication with the patient and other health care professionals, to find one's way in current developments related to the health aspect. Each study course uses a variety of teaching and learning methods, depending on the purpose of the study course and the learning outcomes. The methods to be used have been chosen to implement the aim of the study programme and the specific study course, to acquire skills based on theoretical knowledge. For its implementation, course lecturers, when they choose study methods, implement the principles of student-centred education, which enables students to use different study methods and styles. The methods used are used at both RSU Liepāja Branch and the Red Cross Medical College.

**Lectures** and classes in all study courses use study methods that the content and topics are not conveyed by the lecturer only, but there is also an interactive discussion between students and lecturers, exchange of opinions. To promote better learning of study content, lectures in video format are also available for students in several study courses.

**Classes:** for the acquisition of practical skills there is a demonstration of skills, analysis of clinical cases, role plays (patient or customer and massage therapist), discussions to develop work in a professional team and communication skills. Classes during which students acquire skills in study

courses such as “Classic Massage” and “*Special Types of Massage*” take place in a prepared room for practical classes with the necessary equipment (massage tables, massage chairs, mobile stands for equipment, medical hardware). To master massage skills, students work in small groups (2-3 students), acting both as a massage therapist and as a patient.

To better achieve the aims and learning outcomes set in StP courses, online lectures and classes were the most common type of studies during the Covid-19 pandemic. Student survey results show that students still prefer face-to-face classes.

**Work in small groups:** used to promote communication skills of students, cooperation in a team, experience exchange and joint decision-making. It is used in the study course “*Professional Communication and Ethics*”, but can also be used in other study courses.

**Placement:** Improvement of the skills mastered during studies at RSU LB in health care institutions or placement sites for massage therapists. The description of placement is provided in section 3.2.4.

**Students’ independent work:** students’ independent work plays an important role in the choice of the methods used, its implementation requires looking for information in electronic resources and working with RSU databases. In the study course “Anatomy”, topics covered by the study course can be learned not only based on the materials provided during lectures and classes, but also using the anatomical 3D educational resource *Anatomy Next* (<https://www.rsu.lv/biblioteka/resursi/abonetie-e-resursi/anatomijas-3d-macibu-resursi>). (in english [here](#))

One of the forms for performing independent work is the **e-studies platform:** students have access to materials of lectures and classes, submit independent assignments, as well as pass study examinations.

Chapter 2.1.2 of the Description of the study direction States that within the framework of the direction, study programmes have developed modern and particularly important teaching and pedagogical methods, such as: interactive types of remote studies (Zoom, MST, FaceTime translations, You Tube translations and recordings, Online conferencing translations and the use of clip recordings for studies.

Methodology of simulation technologies has gained a very significant role in the study process and accordingly rapid development: simulations of manipulations, simulations of clinical processes, simulations of processes. To this end, additional financial investments have been made both in different departments of the study direction and at the medical Education Technology Centre (METC). various simulation methods can be found in practically all the programmes of the study direction.

In addition to innovative study methodologies, teaching staff learn at the Centre for Educational Growth, lesson observation processes in many universities of the world, exchange visits and other forms of international cooperation.

Chapter 2.4.6 of the Description of the study direction refers to learning and teaching innovations, which are considered in two perspectives: firstly, methodological innovation, i.e. research, work environment, search, projects, problem situations, etc., promotion of studies based on approaches and methods; second, technological innovation - USE OF H5P, Miro, Turnitin QuickMark, 3D printers, augmented and virtual reality and other solutions to develop a technology-enriched study process.

### **Assessment system**

Assessment of students corresponds to [RSU Academic Regulations I](#) (in English – [here](#)). The assessment is obtained based on the assessment criteria set in the study course, which the course lecturer presents to students at the beginning of the study course, as well as they can be seen in the e-learning environment at each study course description. Assessment of students is the same for all students. An assessment for a mastered study course should be obtained during exams and written examinations.

The national degree examination consists of two parts – theoretical and practical part. The theoretical part of the exam takes place in the *Moodle* environment, students complete a multiple choice test in e-studies within a certain time, while the board participates on site or watches remotely in parallel on the *Zoom* platform to ensure academic integrity –it happened in this way during the Covid-19 pandemic. After successful passing of a theoretical examination, the practical part of the examination takes place, where the student randomly chooses a specific area to be massaged. 1<sup>st</sup> year students of the StP are invited as statisticians. If the practical examination cannot take place on site, then an examination ticket is drawn in the e-learning environment, the student presents the specific clinical case to the board and demonstrates a massage performance in the *Zoom* environment.

Defence of qualification papers takes place on site or in the *Zoom* environment (if necessary, assessing the current situation) in a usual presentation format. The summary assessment of the national degree examination can be seen in e-studies in accordance with the principle of data protection, that is to say, only the student concerned can see the assessment. Based on RSU Academic Regulations I, the student can submit an appeal.

The composition of the national examination Board is composed of the teaching staff of the partner universities of the joint programme, as well as the representatives of employers and associations involved.

### **Feedback**

Feedback is a permanent part of the entire study process. A student receives an oral or written comment about his or her performance in a particular study course and its examinations. At the end of each study course, students are invited to provide an assessment of the study course, the director of the study programme studies all the assessments provided by students, analyses them together with the lecturers of study courses, corrections are made, if necessary. Students can read comments of course lecturers in the e-learning environment, as well as the StP director organises a face-to-face or *Zoom* meeting, informs about the uncertainties, answers students' questions and informs about the expected changes.

### **Principles of student-centred education**

The principles of student-centred education are based on continuous discussion with students and

mutual feedback. Regular meetings between students and the director of the study programme are held to inform about the course of the study process, to provide answers to questions and suggestions of students. The director of the study programme informs about the significance of the assessment of study courses by students in ensuring a quality study process, the recommendations of students are taken into account.

All possible forms of communication are used to communicate with students: face-to-face meetings, e-learning environment and e-mails.

**3.2.4. If the study programme envisages an internship, describe the internship opportunities offered to students, provision and work organization, including whether the higher education institution/ college helps students to find an internship place. If the study programme is implemented in a foreign language, provide information on how internship opportunities are provided in a foreign language, including for foreign students. To provide analysis and evaluation of the connection of the tasks set for students during the internship included in the study programme with the learning outcomes of the study programme (if applicable).**

Placement in StP “Medical Massage” is an essential part of the study process to improve the skills mastered in the study environment by working practically in health care institutions and massage practices with customers and/or patients. In the study environment, practical skills are trained in the presence of a study course lecturer, using course mates as statisticians. Non-standard situations are possible in the real environment, it is necessary to be able to respond quickly to a changing situation, establish communication with customer/patient and colleagues of the placement site.

Placement is based on the procedure for organising placement, which contains references to:

- binding CM Regulations on the state first level professional higher education standard (CM Regulations No. 141 of 20 March 2001, as amended until 29 May 2007);
- cooperation with placement sites and placement supervisors;
- the duration of placement by semesters and the number of CP/ECTS to be obtained;
- the rights and regulations of the organisers of placement (RSU Liepāja Branch), the placement site and the student;
- placement report documentation;
- placement assessment procedure.

The aims and learning outcomes of placement are defined in the study course description. A student may read documents related to placement in the e-learning environment.

Placement is implemented in accordance with placement agreements concluded with health care institutions and placement supervisors. The placement supervisor needs a valid certificate of a massage therapist, which has been issued by the Latvian Association of Physical Medicine.

The selection of placement sites offered by RSU is based on existing cooperation agreements with health care institutions and the experience of the director of the StP in cooperation with placement supervisors, as well as the students' assessment of the placement site and the placement supervisor. A student has the right to choose other placement site and placement supervisor, if the placement site is located in a place more accessible to the student depending on the personal important factors of the student (place of residence, place of work, wish to acquire new experience

in an unusual environment, such as *Erasmus+* placement). In such cases the StP director evaluates the conformity of the placement site and the placement supervisor with the achievement of the learning outcomes. Therefore, the principles of student-centred education are also respected.

In the StP plan, placement is planned:

- in semester 2 of the 1<sup>st</sup> year of studies, when basics of classic massage have been learned and the examination in the study course “Classic Massage” has been passed;
- in semester 3 of the 2<sup>nd</sup> year of studies, when the student has learned different types of massage in the study course “Special Types of Massage”;
- in semester 4 of the 2<sup>nd</sup> year of studies, there is placement of eight weeks to strengthen skills in classic massage and special types of massage (for example, manual lymphatic drainage), linking them to the knowledge and skills learned in other study courses (for example, “Classic Massage”, “Propaedeutics”, etc.).

During placement students work under supervision of the placement supervisor, but independently as much as possible evaluating and analysing the necessary tactics.

The aims and tasks of study placement are related to seven of learning outcomes of the StP (2-8). Placement is also indirectly linked to the learning outcomes 1 and 9 (using medical terminology and the requirements of regulatory enactments in the field of medical treatment).

The student demonstrates the skills and competences mastered during placement at the national degree examination.

RSU provides placement for its students, while the medical college of the University of Latvia P. Stradins also provides placement for its students. If necessary, if a college student wants to practice in Liepaja, the LF shall provide the necessary support.

Enclosed:

Annex 9. Description of the organisation of placement of the students.

### **3.2.5. Evaluation and description of the promotion opportunities and the promotion process provided to the students of the doctoral study programme (if applicable).**

Not applicable.

### **3.2.6. Analysis and assessment of the topics of the final theses of the students, their relevance in the respective field, including the labour market, and the marks of the final theses.**

Students of StP “Medical Massage” write a qualification paper (QP) in accordance with the RSU Regulations on requirements for final papers of students – in Latvian [here](#) , in English – [here](#). When starting studies in the RSU LB study programme “Medical Massage”, during the first meeting the StP Director informs students that the development of a QP is an integral part of the study process.

In cooperation with the lecturer of the study course “Research Methods and Digital Literacy”, the



StP director evaluates topical research directions for students of health care study programmes. Every year in the autumn semester research directions for StP “Medical Massage” related to latest development in health care and/or the selected profession are proposed and approved at the StP Quality Council. In the study course “Research Methods and Digital Literacy” students are urged to prepare qualification papers related to the research directions and/or thematic areas. Students can choose a QP supervisor, who meets the conditions necessary for writing a QP (Master’s degree, good knowledge of the selected research area), as well as agrees to be a QP supervisor. The student, in cooperation with the QP supervisor, clarifies the topic of research and developed scientific categories. The StP director submits topics of QPs of students in Latvian and English and the information on scientific supervisors of the QPs to the Council of the RSU Faculty of Public Health and Social Welfare no later than six months before the expected defence of the QP. Students submit an application for research RSU Research Ethics Committee based on the set requirements. Students are entitled to start their research after obtaining permission from the RSU Research Ethics Committee.

When writing a QP, in the research part students are encouraged to conduct empirical studies, when performing massage, and use measurements or other patient evaluation methods in the evaluation of results. Many students take this specific approach to developing QP, but there are also students who prefer to use other study methods (e.g., questionnaires).

The main thematic areas proposed for writing a QP are directly related to the chosen profession and are:

- health care and promotion (paying particular attention to changes in the health condition of the customer/patient as a result of massage, patients’ opinions on the effects of massage, ergonomics and occupational safety at massage therapist’s workplace);
- quality of massage;
- massage as a complementary method for the treatment of patients;
- choice of non-traditional types of massage;
- ethical aspects of massage therapist’s work;
- issues related to massage therapist’s practice;
- massage and Covid-19 (attention to the global Covid-19 situation has been drawn in recent years).

The topics of final papers of students relate to current developments in the sector, including the recommended thematic areas mentioned here. When assessing the qualification papers written, it can be seen that the use of massage in promoting public health of different focus groups, such as static work performers, athletes, groups of society with signs of increased stress, patients with musculoskeletal system or other diseases, public opinion and understanding of the use of massage, as well as the use of alternative types of massage are studied. Many of the written qualification papers benefit from the ability of students to perform analytical work on previous research related to the use of massage, and also empirical research of students when performing a massage course and evaluating changes in the health condition of patients/customers. Thus, the skills acquired by students in the study process and professional quality are confirmed, which indicates the ability to enter the labour market after the completion of studies.

When analysing average assessments of qualification papers, it can be seen that they are:

in academic year 2016/2017 – 8.2;

in academic year 2017/2018 – 6.9;

in academic year 2018/2019 – 7.1;

in academic year 2019/2020 – 7.8;

in academic year 2020/2021 – 7.8;

in academic year 2021/2022 – 7.8.

The quality of final papers is confirmed by the fact that since the beginning of the implementation of the study programme five students received an assessment of 10 (with distinction). The average assessment of qualification papers across all years of studies is 7.6.

Enclosed:

Annex 22. Topics of students' final papers.

### **3.3. Resources and Provision of the Study Programme**

**3.3.1. Assessment of the compliance of the resources and provision (study provision, scientific support (if applicable), informative provision (including libraries), material and technical provision, and financial provision) with the conditions for the implementation of the study programme and the learning outcomes to be achieved by providing the respective examples.**

Studies take place only in RSU LB premises, which are equipped for ensuring a high-quality study process. Lectures are read in auditoriums. Classes, depending on the type of studies, are organised in audiences or a room for practical classes. The room for practical classes for students of StP “Medical Massage” is equipped for mastering specific skills of the programme to achieve the outcomes of the programme. The room is equipped with:

- 10 mobile massage tables with a headrest;
- three massage chairs for neck and back massage area;
- six mobile stools used massage while sitting;
- 10 work stools;
- cabinets of different sizes (towels, pillows and other small equipment);
- equipment for the study course “Special Types of Massage” to massage with medical devices;
- containers for massage oils;
- refrigerator for storing massage oils;
- mobile stands for equipment required for massage;
- board

Physical medical hardware has been purchased for the implementation of practical classes in massage with medical devices within the scope of the study course “Special Types of Massage”:

- myostimulation massage device;
- darsonvalization device;
- ultrasonic massage device;
- vacuum massage device.

The diversity of massage oils enables students to choose the preferable or suitable (base, linden, lavender, grapefruit, etc.) oils.

The room for practical classes is used in study courses with classes:

- “Classic Massage”;
- “Special Types of Massage”;
- “Paediatrics and Paediatric Massage”.

The classroom meets occupational safety requirements, is large and open, activities of all students can be followed there. Principles of ergonomics are observed during practical classes (the height of massage tables and chairs, the distance to working areas, the room temperature can be changed).

Evaluating the resources and provision (compliance of the study base, information base (including libraries), material and technical provision with the conditions for the implementation of the STP and the compliance with the learning outcomes, it can be assessed that it is fully appropriate for the implementation of the study process of high quality, and it is regularly reviewed, evaluated, updated and developed. For example, in the academic year 2022/2023, the newly acquired medical equipment for massage was started, as well as the necessary funds for practical massage are purchased each year.

In the provision of e-resources for the study programme “Medical Massage”, five e-book databases and seven full-text databases of e-journals are available. The availability of E-resources in Liepaja branch is the same as in the Library departments in Riga.

E-books on therapeutic massage and research methods are available in the subscribed databases ebook academic collection (EBSCO), ebook Central (Proquest), AccessMedicine, ClinicalKey, sage Research methods. For example, the database ebook academic collection (EBSCO) offers 28895 e-books under the section “Health and medicine”, but ebook Central (Proquest) - 21885 e-books, but according to the topic “Physiology”, the database ebook academic collection (EBSCO) offers 2962 e-books and ebook Central (Proquest) - 1916 e-books. The subscribed multidisciplinary databases ebook Central (ProQuest) and EBSCO eBook academic collection offer e-books of various publishers for various sectors providing results of the selected information when searching by various topics/keywords, such as ebook Central (ProQuest) and EBSCO eBook academic collection contain 180 e-books on the topic “Massage”.

The full texts of scientific papers in medicine are available in the subscribed databases: Age Premier 2023, Health Research Premium collection (proquest), MEDLINE complete (EBSCO), BMJ journals, Wiley Online journals, Science direct, academic Search complete (EBSCO). 6939 journal titles appear in the single search engine Primo in the sector “Health Sciences”, 699 journal titles in the sub-sector “Physiology”, 439 journal titles in the sub-sector “neurology” and 63 journal titles in the sub-sector “anatomy”.

Evidence-based medical databases ClinicalKey clinical overviews (Elsevier), the Cochrane Library (Wiley), DynaMed (EBSCO) are also available.

Dissertations from many countries around the world in various fields of science, including medicine and nursing, are available in the ProQuest dissertations & Theses global database: The Sciences and Engineering collection.

Students are also provided with access to news and reference databases such as Encyclopedia Britannica academic Edition, Letonika, LETA news archive, Nozare.lv, News.lv (Lursoft).

On the Library website, in the section [List of recommended e-textbooks](#), the e-books mentioned in the massage study programme are summarised - both purchased and from subscribed databases

(the sections “Massage, medical Massage”, “Research methods”, etc. are available).

Enclosed:

Annex 23.2. Assessment of the informative and methodological provision regarding library resources for the implementation of the study programmes in Liepāja branch in accordance with the requirements of the guidelines.

Annex 23.3. Assessment of the information and methodological base on IT resources.

**3.3.2. Assessment of the study provision and scientific base support, including the resources provided within the framework of cooperation with other science institutes and higher education institutions (applicable to doctoral study programmes) (if applicable).**

Not applicable.

**3.3.3. Indicate data on the available funding for the corresponding study programme, its funding sources and their use for the development of the study programme. Provide information on the costs per one student within this study programme, indicating the items included in the cost calculation and the percentage distribution of funding between the specified items. The minimum number of students in the study programme in order to ensure the profitability of the study programme (indicating separately the information on each language, type and form of the study programme implementation).**

It is planned to fund the study programme from state budget funds and the funds of individuals and legal entities setting the tuition fee in accordance with the state budget funding without social security of EUR 4890 per year of studies. Discounts are available in the StP in accordance with internal norms and regulations. The number of students planned to be achieved in two years of the study programme is 37 students, enrolling 20 students in the first year, and planning a drop-out of 3 students in the second year. Following high inflation and under conditions of a rapid increase in prices of energy sources, the result of the study programme is negative, because there is shortage of funding from state budget funds in accordance with Cabinet Regulations No.994 – study base costs no longer cover infrastructure maintenance costs. The information on additional performance funding allocated, which was approved in the budget of the Ministry of Education and Science, will be available in the second half of 2023.

The funding is used for staff remuneration, attraction of visiting assistant professors, taxes, maintenance of IT infrastructure, purchase of equipment and devices, and study visit costs. In addition to the direct costs of implementation of lectures and classes, the StP must cover infrastructure maintenance costs (facilities, IT solutions) and other RSU common resources used in the StP (Student Services, Library, organisation of the study process, grant for the Student Union and other support and administrative functions).

The StP is implemented by RSU Liepāja Branch. Remuneration of the academic staff in the first year of the StP is planned to be around EUR 29 thousand.

The costs per 1 student per academic year for the study programme “medical Massage” constitute EUR 2684. The study programme has state funding for 8 state-funded study places, amounting to EUR 5553 per state-funded study place from 1 September 2023. The profitability of the study programme is planned to be achieved by the number of existing students, but by increasing the tuition fee for students from EUR 1700 to EUR 2000 per academic year.

Starting from 1 September 2023, the state budget funding for 1 study place constitutes EUR 5553 per academic year, the amount of the fee-based study fee with the allowance for excellence, which is determined taking into account the projected drop-out of students by academic year 2023/2024 constitutes EUR 1700.

The implementation of the study programme is ensured only at RSU Liepaja branch, and the ability to provide the necessary resources is taken into account when receiving students.

**Table 2. Information on student costs**

<b>Name</b>	<b>Result with the existing tuition fee</b>	<b>Result with the projected tuition fee</b>
Average income per student, EUR	2423	2686
Average cost per student, EUR	2666	2684
Academic staff, %	55	55
Department resources, %	32	31
Scholarship costs, %	1	1
Fixed costs, %	2	2
Overheads, %	10	11

## 3.4. Teaching Staff

**3.4.1. Assessment of the compliance of the qualification of the teaching staff members (academic staff members, visiting professors, visiting associate professors, visiting docents, visiting lecturers, and visiting assistants) involved in the implementation of the study programme with the conditions for the implementation of the study programme and the provisions set out in the respective regulatory enactments. Provide information on how the qualification of the teaching staff members contributes to the achievement of the learning outcomes.**

The teaching staff involved in the implementation of StP “Medical Massage” have a scientific doctoral degree (two), a Master’s degree or also relevant professional education for teaching the study course concerned. The qualification of teaching staff involved in the implementation of conditions of implementation of the study programme and the requirements of regulatory enactments, as well as ensures the achievement of learning outcomes of the study programme.

StP director **Dina Berloviene** graduated from the Faculty of Medicine of the University of Tartu majoring in sports medicine, and obtained a Master’s degree in education sciences. She has experience in rehabilitation, leading a children’s rehabilitation centre, as well as in the implementation of the study course “Rehabilitation” to students of the study programme “Nursing Studies”. Her education and professional experience make it possible to implement study courses like “Anatomy” and “Foundations of Rehabilitation” in StP “Medical Massage”. Dina Berloviene graduated from the Liepaja University, completed doctoral studies in pedagogy. Author (three) and co-author (three) of several scientific articles.

Certified massage therapists are involved in industry specific study courses of StP “Classic Massage” and “Special Types of Massage”. The head of the study course “Classic Massage” **Ina Trama** graduated from the RSU study programme “Health Sport Specialist” and “Medical Massage”, works as a practicing massage therapist at the Rehabilitation Department of Kuldiga Hospital.

The lecturer of study course “Special Types of Massage” **Baiba Feldmane** is a practicing massage therapist and general care nurse, until the year of studies 2022/2023 she taught the study course “Classic Massage”. Due to her daily workload, she chose to reduce the study work with students.

Certified physiotherapist **Agnese Krētaine**, who has long experience in rehabilitation (practicing physiotherapist) is involved in the implementation of the StP. She is on the commission of the Latvian Association of Physiotherapists, is a lecturer at the Liepaja University and reads the course “Kinesiology”. In 2022, passed recertification at Upledger Institute International in the use of therapy techniques “Craniosacral Therapy”, participated in the 2nd European Pediatric Physiotherapy Congress with a poster presentation “Changes in the child’s sleep after a massage performed by the parents”, as well as presented a clinical case study report “Report on the use of physiotherapy interventions in children with paraparesis of lower extremities and *spina bifida myeloencephala* – case report” at the clinical conference of the Latvian Association of Physiotherapists. In StP “Medical Massage”, reads parts “Segment massage” and “Pressure Point Massage” in the study course “Special Types of Massage”.

Agnese Krētaine is involved in the implementation of the study course “Paediatrics and Paediatric Massage” together with the paediatrician **Inga Petermane**, who is an RSU lecturer with extensive experience of work with students in LB study programmes “Physician Assistant” and “Nursing Studies”. Inga Petermane is a practicing paediatrician, lecturer of study courses “Propaedeutics” and “Pharmacology” in StP “Medical Massage”, as well as obtained a Master’s degree in education sciences.

**Kārlis Pļaviņš**, lecturer of the part “Sports Massage” of the study course “Special Types of Massage”, is a personal trainer, graduated from the RSU study programme “Health Sport Specialist” (RSU Liepāja Branch). Learned Sports Massage in continuing education. One of the most experienced *Crossfit* trainers in Latvia, represented the national team of the Latvian Bobsleigh Federation.

**Ilze Briža**, lecturer of parts “Manual Lymphatic Drainage” and “Massage with Medical Devices of

the study course “Special Types of Massage”, is a certified beauty specialist in cosmetology, works in a private practice of cosmetology and aesthetic medicine. Obtained professional education at the Pauls Stradins Medical College of the University of Latvia and a Master’s degree in education management at the University of Latvia. She has experience in work with students at the Pauls Stradins Medical College of the University of Latvia and the Daugavpils Medical College of the University of Daugavpils. Currently, a doctoral student in education sciences at the University of Daugavpils. Author of several scientific articles.

**Gunta Bēta**, head of study courses “*Public Health and Environmental Protection*” and “*Professional Communication and Ethics*”, is a lecturer of RSU LB with extensive experience in study work, coordinated the study programme “Nursing Studies” at the Liepāja Branch. Professional knowledge is based on long work as a practicing nurse in health care. Obtained a doctoral degree in pedagogy, author of several scientific papers.

**Dita Role**, lecturer of the study course “*Basics of Business*”, is the director of RSU LB, she has extensive experience in organisational work. Organisational skills in massage therapist’s are evaluated as significant, in particular in establishing individual places of practice. She completed doctoral studies in pedagogy at Liepaja University.

The profession standard for a massage therapist provides that a practicing massage therapist need to know how to communicate with customers in a foreign language. Public mobility is observed in the EU context, most commonly used spoken language is English. **Dagnija Deimante**, lecturer of English in the study course “Medical Terminology in Foreign Languages”, obtained a Master’s degree in English language philology at the University of Latvia and a doctoral degree in pedagogy at Liepaja University. She has long experience in teaching English to students of Liepaja University and in RSU LB health care study programmes: “Nursing Studies” and “Physician Assistant”. Having received a Fulbright teacher scholarship in academic year 2005/2006, she taught English at Avondale School, State of Georgia, United States. Author of scientific articles.

At the end of StP, students must write a qualification paper. The study course “Research Methods and Digital Literacy” is taught during studies for its implementation. The course lecturer **Līga Ēriksone** has experience in supervision and review of qualification papers, Bachelor’s and Master’s theses, as well as reading of research study courses to students of health care study programmes.

From 1 January 2017 to 1 October 2022, 12 lecturers of the study programme “Medical Massage” participated in continuing education activities of the Centre for Educational Growth attending more than 60 training activities of different content. Lecturers of the level 1 professional StP “Medical Massage” have devoted a total of 1384 academic hours to the mastering of continuing education activities.

The lecturers participated in the following activities: Creating animated visual study materials; Remote group work of students using the *Miro* tool; Open access to scientific information; Think tank: Feedback as a sources of cognition and possibility to improve oneself; *EndNote* tool for management of references online; Inclusive digital design; Drafting of interactive study materials (*H5P*); Interactive presentations and real-time feedback in the *Mentimeter* tool; How to promote the acquisition of transversal skills relevant to the working environment in the study process; How to make complex easily understandable? Interactive training game “Cell”; Potential of conflict for building cooperation; Research methodology and statistical processing of data; How to promote the acquisition of transversal skills relevant to the working environment in the study process; Evidence-based medicine information databases; Content visualisation in presentations; Assessment approaches and types of examinations in remote studies and many other.

The implementation of the study programme involves highly qualified lecturers who are experts in

the field and specialise in the respective study course topic. Several visiting lecturers are invited due to the specifics of content of individual courses. Sound choice of teaching staff makes it possible to implement the study programme, ensure high-quality study process and to achieve aims and outcomes of study courses.

Enclosed:

Annex 24.7. Analysis of the composition of the teaching staff.

### **3.4.2. Analysis and assessment of the changes to the composition of the teaching staff over the reporting period and their impact on the study quality.**

On the basis of assessment questionnaires of the study process, including teaching staff, the provision of teaching staff is regularly monitored. Changes in the composition of teaching staff for the next year of studies are planned in spring of the previous year.

The composition of the lecturers in industry-specific study courses during the implementation of the StP has changed due to personal reasons of the lecturers involved, as well as on the basis of the students' assessment of the quality of the implementation of the study course and the professional conformity of the lecturer for the implementation of the course.

From the beginning of the StP until now, there have been three changes in lecturers of the study course "Classic Massage". For the first time, a lecturer as changed due to two reasons mentioned here – the lecturers had health problems and therefore could not ensure high quality of the course, and students provided an assessment regarding this. The employment relationship between the Director and the lecturer of StP was terminated by mutual agreement. In two cases, changes took place based on lecturer's own wish, as both of the teaching staff representatives were industry professionals, worked as practicing massage therapists and were busy in their places of practice. Students gave positive assessments to both lecturers.

In academic year 2021/2022, a new lecturer was involved in the implementation of the study programme in study courses "Manual Lymphatic Drainage" and "Aesthetic Hardware Massage" (from academic year 2022/2023 "Massage with Medical Devices", from academic year 2023/2024 "Special Types of Massage"), because students were dissatisfied again with the implementation of study courses and professional preparedness of the lecturer. Having studied the assessment of study courses and lecturers by students, it can be seen that the replacement of the lecturer was successful, high assessment was received about what was learnt in study courses and the lecturer.

The attraction of new lecturers, specialists in the field, is evaluated as a factor contributing to the quality of the study programme.

The change in lecturer's position from acting lecturer to acting Assistant Professor in two StP lecturers (Dita Role and Dina Berloviene) based on doctoral studies can be mentioned as changes in academic staff.

Small changes in teaching staff in individual study courses are more related to the load of lecturers in other study programme and are not considered significant and influencing the general quality of the StP.



**3.4.3. Information on the number of the scientific publications of the academic staff members, involved in the implementation of doctoral study programme, as published during the reporting period by listing the most significant publications published in Scopus or WoS CC indexed journals. As for the social sciences, humanitarian sciences, and the science of art, the scientific publications published in ERIH+ indexed journals or peer-reviewed monographs may be additionally specified. Information on the teaching staff included in the database of experts of the Latvian Council of Science in the relevant field of science (total number, name of the lecturer, field of science in which the teaching staff has the status of an expert and expiration date of the Latvian Council of Science expert) (if applicable).**

Not applicable.

**3.4.4. Information on the participation of the academic staff, involved in the implementation of the doctoral study programme, in scientific projects as project managers or prime contractors/ subproject managers/ leading researchers by specifying the name of the relevant project, as well as the source and the amount of the funding. Provide information on the reporting period (if applicable).**

Not applicable.

**3.4.5. Assessment of the cooperation between the teaching staff members by specifying the mechanisms used to promote the cooperation and ensure the interrelation between the study programme and study courses/ modules. Specify also the proportion of the number of the students and the teaching staff within the study programme (at the moment of the submission of the Self-Assessment Report).**

Mutual interrelations and succession of study courses are observed in the StP. Cooperation between teaching staff was implemented:

- in **talks** on mastering of topics strengthening and supplementing what is mastered in each study course to promote the achievement of outcomes of study courses (the study courses implemented until academic year 2022/23 are indicated):
  - “Anatomy” and “Physiology and Pathophysiology”,
  - “Anatomy” and “Medical Terminology in Latin”,
  - “Professional Communication” and “Pedagogy”,
  - “Professional Communication” and “Medical Terminology in English”,
  - “Clinical Medicine”(several lecturers are involved),
  - “Paediatrics and Paediatric Massage” (several lecturers are involved),
  - “Special Types of Massage” (several lecturers are involved);
- **development of examinations:**
  - “Clinical Medicine”,

- “Special Types of Massage”.

The Director of StP conducts discussions with lecturers of courses to promote the implementation of better study courses on the basis of the StP learning outcomes and the evaluations provided by students;

- **observation of teaching:**
- lecturers participate in classes of other lecturers to improve professional knowledge and academic skills;
- the Director of StP observes teaching of individual study courses to better understand the study process, as well as to support the inclusion of new lecturers in the study environment;
- **in cooperation with RSU RCMC:**
- the **StP Quality Council** (RSU LB and RSU RCMC programme directors, lecturers and students) evaluates latest development in the study process; technical planning of the study programme, the creation of new study courses; updates thematic areas, which are offered to students for the development of QP;
- **StP lecturers** participate:
- reviewing of qualification papers;
- assessment of qualification papers;
- development of questions for the national degree examination;
- assessment of the national degree examination.

The ratio of the number of students and teaching staff in the study programme: 48 students and 26 lecturers. The ratio of the number of students and teaching staff is 1.8.

# Annexes

III - Description of the Study Programme - 3.1. Indicators Describing the Study Programme		
Sample of the diploma and its supplement to be issued for completing the study programme	24.1_Diploms_Arstnieciska_masaza_eng.pdf	24.1_Diploms_Arstnieciska_masaza_lv.pdf
For academic study programmes - Opinion of the Council of Higher Education in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions (if applicable)		
Compliance of the joint study programme with the provisions of the Law on Higher Education Institutions (table) (if applicable)	15_Anx_Compliance_joint_StP_Med_Message.pdf	15_pielik_kopigas_programmas_atbilstiba_Arstn_mas.pdf
Statistics on the students in the reporting period	16_Anx_Statistical data students_Med_Message.pdf	16_pielik_Studejoso statistika_Arstn_mas.pdf
III - Description of the Study Programme - 3.2. The Content of Studies and Implementation Thereof		
Compliance with the study programme with the State Education Standard	17.1_Anx_Compl_with_Nat_Ed_Stand_Med_Message.pdf	17.1_pielik_Atbalst_valsts_izgl_stand_Arstn_masaza.pdf
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard or the requirements for professional qualification (if applicable)	18.2_Anx_Compliance_w_Occupational Standard_Med_Message.pdf	18.2_pielik_Studiju programmas Arstnieciska masaza atbilstiba profesiju standartam.pdf
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)	17.2_Anx_Compl_w_the_field-specific_regulatory_framework_Med_Message.pdf	17.2_pielik_Atbalst_nozares_specifikajam_regulejumam_Arstn_mas.pdf
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	18.1_Anx_St_course_mapping_to_achieve_learn_outcomes_Med_Message.pdf	18.1_pielik_St_kursu_kartej_st_rezult_sasn_Arstn_masaza.pdf
The curriculum of the study programme (for each type and form of the implementation of the study programme)	19_Anx_Study plan_Med_Message.pdf	19_pielik_K1LPSP_Arstn_masaza_planojums_lv.pdf
Descriptions of the study courses/ modules	20_Anx_Study_course_description_Medical_Message.pdf	20_pielik_Kursu_apr_Arstn_Masaza.pdf
Description of the organisation of the internship of the students (if applicable)	9_Anx_Student placement organisation_Med_Message.pdf	9_pielik_Studejoso prakses organizācijas apraksts_Arstn_mas.pdf
III - Description of the Study Programme - 3.4. Teaching Staff		
Confirmation that the academic staff of the doctoral study programme includes not less than five doctors, of which at least three are experts approved by the Latvian Council of Science in the branch or sub-branch of science in which the study programme intends to award a scientific degree (if applicable)		
Confirmation that the academic staff of the academic study programme complies with the requirements specified in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions (if applicable)		

# Clinical Pharmacy (47725)

Study field	<i>Health Care</i>
ProcedureStudyProgram.Name	<i>Clinical Pharmacy</i>
Education classification code	<i>47725</i>
Type of the study programme	<i>Professional master study programme</i>
Name of the study programme director	<i>Inga</i>
Surname of the study programme director	<i>Gūtmane</i>
E-mail of the study programme director	<i>inga.gutmane@rsu.lv</i>
Title of the study programme director	<i>Maģistra grāds klīniskajā farmācijā</i>
Phone of the study programme director	
Goal of the study programme	<i>The aim of the professional Master's study programme "Clinical Pharmacy" is to provide an opportunity to acquire theoretical knowledge of clinical pharmacy, data analysis and research skills and to apply them in practice that would ensure the ability of the specialist to independently assess, analyse and supervise situations related to the safe, rational and economically justified use of medicinal products in the healthcare system by joining a multiprofessional and interdisciplinary team.</i>
Tasks of the study programme	<p><i>1. To provide an opportunity to acquire extensive theoretical knowledge of clinical pharmacy, clinical pharmacology and scientific research methods.</i></p> <p><i>2. To provide an opportunity to acquire the skills to use logical techniques for advising clients/patients and colleagues on medicinal products.</i></p> <p><i>3. Provide an opportunity to develop critical thinking and the ability to analyse the available information, develop skills for analysing alternative situations and making evidence-based decisions.</i></p> <p><i>4. To promote the competitiveness of specialists in local and EU labour market.</i></p> <p><i>5. Prepare for doctoral studies by creating motivation for obtaining a doctoral degree.</i></p> <p><i>6. Promote the growth of academic staff.</i></p>

Results of the study programme	<p>1. <i>Able to demonstrate in-depth and extended theoretical and methodological knowledge of clinical pharmacy, pharmacology, drug metabolism and their interactions, pharmaceutical biochemistry and toxicology, pharmacoeconomics, ensuring reliable, rational and economically justified diagnosis and pharmacotherapy.</i></p> <p>2. <i>Able to use the acquired knowledge and problem-solving skills, evidence-based pharmaceutical principles to carry out research paper, as well as highly qualified professional functions of clinical pharmacist, choosing the most appropriate medical treatment model for the patient together with their doctor and carrying out supervision of the medical treatment.</i></p> <p>3. <i>Able to independently formulate and critically analyse the pharmacotherapy prescribed for patients, taking into account the diagnosis, symptoms, examination results, as well as the principles of safety, efficacy and economics.</i></p> <p>4. <i>Ability to organise and execute direct distribution of medicinal products, monitoring of the administration of medicinal products and side effects caused by their use in patients, and, if necessary, to initiate pharmacotherapy adjustments.</i></p> <p>5. <i>Able to participate in the development of rational pharmacotherapy-oriented health policy, in setting development directions and goals, in forecasting and planning certain stages thereof, in decision-making and in improvement of the system.</i></p> <p>6. <i>Able to carry out monitoring, evaluation and analysis of drug use and consumption.</i></p> <p>7. <i>Able to contribute to the organisation and supervision of clinical trials, as well as participate in the work of the committee for medicinal products of the medical institution.</i></p> <p>8. <i>Able to reasonably explain and discuss issues of drug prescription (pharmacodynamics, pharmacokinetics, pharmacoeconomic analysis) with healthcare specialists and patients.</i></p> <p>9. <i>Within the framework of the Master's thesis, able to formulate and analyse topical problems in clinical pharmacy, carry out a summary of scientific literature, choose the most appropriate way to solve the problem and obtain data, process data, collect the obtained information, analyse it, provide own assessment and present the results.</i></p>
Final examination upon the completion of the study programme	<p><i>Complex National examination, which consists of two parts:</i></p> <p><i>Defence of Master's thesis;</i></p> <p><i>National examination – analysis and presentation of a theoretical clinical case study.</i></p>

# Study programme forms

## Full time studies - 2 years, 6 months - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	<i>2</i>
Duration in month	<i>6</i>
Language	<i>latvian</i>
Amount (CP)	<i>100</i>
Admission requirements (in English)	<i>Higher education in pharmacy (pharmacist's degree or Master's degree of health sciences in pharmacy) (or equivalent higher education) Entrance examination</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	<i>Professional Master's Degree in Health Care</i>
Qualification to be obtained (in english)	<i>Clinical Pharmacist</i>

## Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

### 3.1. Indicators Describing the Study Programme

**3.1.1. Description and analysis of changes in the parameters of the study programme made since the issuance of the previous accreditation form of the study field or issuance of the study programme license, if the study programme is not included on the accreditation form of the study field, including changes planned within the evaluation procedure of the study field evaluation procedure.**

Table 1. Changes in Parameters of the Study Programme (StP)

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period (until 2022)	Planned changes within the assessment procedure (after the accreditation)
1.	Study direction	—	—
2.	Title of the StP	—	—
3.	Code according to the Latvian Education Classification	—	—
4.	Director of the StP	—	—
5.	Scientific degree of the director of the StP	—	—
6.	Objective of the StP	—	—
7.	Tasks of the StP	—	—
8.	Learning outcomes to be achieved	—	—
9.	Final examination upon the completion of the StP	—	—
10.	Type and form of studies	—	—
11.	Duration of implementation	—	—
12.	Language of implementation	—	—
13.	Workload of the StP (CP)	—	—

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period (until 2022)	Planned changes within the assessment procedure (after the accreditation)
14.	Admission requirements	—	—
15.	Degree to be awarded	—	—
16.	Qualification to be awarded	—	—
17.	Place of implementation	—	—

Table 1 shows that since the last accreditation there have been no changes in the parameters of the study programme, as the professional programme has been implemented only since 2012 and there have been six graduations in this period, therefore, during this period the content of the study programme was improved in order to better achieve the objective and planned outcomes of the study programme.

**3.1.2. Analysis and assessment of the study programme compliance with the study field. Analysis of the interrelation between the code of the study programme, the degree, professional qualification/professional qualification requirements or the degree and professional qualification to be acquired, the aims, objectives, learning outcomes, and the admission requirements. Description of the duration and scope of the implementation of the study programme (including different options of the study programme implementation) and evaluation of its usefulness.**

Clinical pharmacy is a healthcare discipline in which pharmacists provide patient care, optimising drug therapy and promoting health preservation, disease prevention, and improvement in quality of life. The practice of clinical pharmacy encompasses the philosophy of pharmaceutical care; it combines care with specialised therapeutic knowledge, experience and decision-making to ensure optimal patient outcomes. Clinical pharmacy links science with practice on rational use of medicines.

The code of the clinical pharmacy study programme is 47725. According to the regulations of the Cabinet of Ministers No. 322, code 47 refers to second-level professional higher education (professional master's degree or fifth-level professional qualification), which may be acquired after obtaining a bachelor's degree or a professional bachelor's degree. The duration of full-time studies must be no less than one year. Part "725" of the code describes the group of educational programmes – "Pharmacy". Accordingly, the study programme code 47725 describes a master's level professional programme that results in a professional master's degree in health care and the professional qualification of a clinical pharmacist.

The development of the study programme started in the academic year 1998/1999 with an academic Master's study programme, which was implemented until 10.02.2012. The conversion of the programme into a professional Master's programme took place on 10.09.2012 in order to



promote the development of clinical pharmacy and to provide an opportunity to create closer links between the students of the programme and medical treatment institutions and to enable them to prepare more comprehensively for practical work in a unified team of health care professionals.

The Mapping Clinical Pharmacy Education and Practice in Europe<sup>[1]</sup> study, conducted at the University of Lisbon in 2019, provides information on clinical pharmacy education in Europe. It concludes that more than half (61%) of European countries have a Master's and/or equivalent diploma/degree as evidence of clinical pharmacist education (qualification). In addition, a Master's and/or diploma/degree in pharmacy from European university faculties of pharmacy requires on average 4 semesters, 207 contact hours per semester and 36 ECTS. About 39% of education is practical. The duration of the RSU professional Master's study programme "Clinical Pharmacy" is 5 semesters, 240 contact hours and 30 ECTS per semester, the placement amounts to 39 ECTS.

The aim of the professional Master's degree programme Clinical Pharmacy is to provide an opportunity to acquire theoretical knowledge in clinical pharmacy, data analysis and research skills, to apply them in practice, which would enable the specialist to independently assess, analyse and monitor situations related to safe, rational and economically sound use of medicines in the health care system, becoming part of a multiprofessional and interdisciplinary team.

Clinical pharmacy competence is achieved when an individual has the knowledge, skills and attitudes necessary to provide direct patient care, ensuring rational use of medicines.

The tasks of the study programme (6) and the results to be achieved (9) are reflected in the parameters of the study programme and Annex 18.1, where the mapping of study courses has been analysed according to the results to be achieved. When designing and developing the study programme, the results to be achieved are defined. The study courses and placement are subjected to the main task – to prepare specialists who are able to formulate and analyse topical problems, collect scientific literature, process data, choose the most appropriate method for solving problems and obtaining data, collect the acquired information, analyse it, provide their assessment and present the results. On this basis, the admission requirements require knowledge acquired in the pharmacist undergraduate studies as evidenced by a diploma and the submission of a written essay demonstrating the applicants' ability to understand, analyse and present their existing knowledge and analytical abilities.

RSU applicants apply electronically on website <https://www.rsu.lv/en/study-here/admissions>. The technical process of admission is developed and described in RSU Process Description No. 39 Organisation of Admission to RSU Study Programmes in Latvian.

Enclosed:

Annex 24.1. Sample Diploma and Supplement Thereto.

Annex 24.8. Sample Study Contract.

<sup>[1]</sup> Moura, L., Steurbaut, S., Blix, H. et al. (2021). Mapping clinical pharmacy education and practice in Europe. *Research Square*. <https://doi.org/10.21203/rs.3.rs-321697/v1>

### **3.1.3. Economic and/ or social substantiation of the study programme, analysis of graduates' employment.**

34 students have graduated from the professional programme since September 2012.

All alumni are employed, and their education leads to correspondingly high salaries. Alumni work in hospitals, open-type pharmacies, state institutions, continue education in doctoral studies, as well as are involved in the education of new specialists and participate in the implementation of postgraduate education programmes.

The clinical pharmacist profession is not yet fully developed in Latvia; currently, two such specialists work at the Children's Clinical University Hospital, one at the Riga East Clinical University Hospital, three at the Pauls Stradiņš Clinical University Hospital, as well as at the Valmiera and Daugavpils hospitals. Such a small number of clinical pharmacists working in medical treatment institutions is insufficient. Increasing the number of staff is still hampered by insufficient health care funding, which prevents hospitals from creating new full-time positions, and by the fact that specialists who start work leave because of higher-paying job offers.

Alumni of the programme are highly regarded as experts in drug therapy and are invited to work for international clinical research companies (two – ICON Clinical Research Services; one – Tetra Bio-Pharma). Five alumni work as lecturers at RSU, Red Cross Medical College of Rīga Stradiņš University and Riga First Medical College of the University of Latvia, as well as continue their studies in doctoral programmes in Latvia and abroad

(<https://med-tech.world/people/jekaterina-parovincaka/>). The new specialists are also involved in the social activities of the sector – the Pharmacists' Society of Latvia has established a Clinical Pharmacists Section <https://www.farmaceitubiedriba.lv/lv/klinisko-farmaceitu-sekcija> (Latvian only) and Oncology Pharmacists Section

<https://www.farmaceitubiedriba.lv/lv/onkologisko-farmaceitu-sekcija-1> (Latvian only). Both sections were founded and are headed by alumni of the programme.

Personal qualities and high motivation of the alumni to achieve their goals lead to relatively high remuneration levels, which do not reflect the actual level of remuneration in the specialty. In order to promote the development of the profession, clinical pharmacists need to be defined at national level as participants in the treatment process and included in the remuneration system, which would ensure stable salary growth and motivate alumni to work in health care institutions.

Currently, the Ministry of Health is in the process of improving the remuneration system and the director of the programme, in collaboration with the Pharmacists' Society of Latvia, has prepared proposals and has been involved in a working group to address this issue.

#### **3.1.4. Statistical data on the students of the respective study programme, the dynamics of the number of the students, and the factors affecting the changes to the number of the students. The analysis shall be broken down into different study forms, types, and languages.**

Admission to the professional Master's study programme "Clinical Pharmacy" takes place every other year, so changes in the number of students in the programme are cyclical. The programme has 10 state-funded study places.

Upon admission to the programme, all state-funded study places are filled and there is a competition for them. The study programme requires a high level of motivation and self-discipline, as all students are also full-time employees, so combining intensive studies with work and family life is a challenge that only highly motivated individuals can accomplish. The number of study

programme alumni per year ranges from 2 to 8, but this does not fully reflect the dynamics of leavers, as several students return after academic leave and successfully complete their studies. There are also students who do not continue their studies for various reasons, the most common being the difficulty (impossibility) of combining studies with a full-time job, or changes in family life. Studies are also interrupted when the theoretical part, which is applicable in the current workplace, has been mastered and the student has no motivation to continue the placement, develop the Master's thesis and pass the national examinations.

Although the programme is small and of a relatively narrow specialisation, students also participate in Erasmus mobility programmes. Since 2016, Erasmus students have had the opportunity to experience clinical pharmacy work in Germany, the Netherlands and Slovenia. Students also regularly attend congresses of the European Association of Hospital Pharmacists (EAHP), as well as professional continuing education events for pharmacists in Latvia and the Baltic States.

The professional Master's study programme "Clinical Pharmacy" has had 6 graduations so far, and 34 students have graduated.

In order to raise the profile of the profession in the community and among health care professionals, alumni of the programme were invited to participate in a collaborative project with their Estonian counterparts – the Medicines Use Review <https://ncpc2019.erpmusic.com/materials/Presentation%20NCPC%202019%20LAT.pdf>, but the Covid-19 pandemic prevented the full continuation of this project.

Enclosed:

Annex 16. Statistical Data on Students.

### **3.1.5. Substantiation of the development of the joint study programme and description and evaluation of the choice of partner universities, including information on the development and implementation of the joint study programme (if applicable).**

Not applicable.

## **3.2. The Content of Studies and Implementation Thereof**

### **3.2.1. Analysis of the content of the study programme. Assessment of the interrelation between the information included in the study courses/ modules, the intended learning outcomes, the set aims and other indicators with the aims of the study course/ module and the aims and intended outcomes of the study programme. Assessment of the relevance of the content of the study courses/ modules and compliance with the needs of the relevant industry, labour market and with the trends in science on how and whether the content of the study courses/ modules is updated in line with the development trends of the relevant industry, labour market, and science.**

The study courses of professional Master's study programme "Clinical Pharmacy" are designed

using an integrated approach – when studying the disciplines of internal diseases, the elements of pathological anatomy, pathological physiology, pharmacology and pharmacotherapy are used in the study of a single topic. The course is delivered by lecturers from three departments – the Department of Internal Diseases, the Department of Pharmacology and the Department of Pathology – including alumni of professional Master’s study programme “Clinical Pharmacy”. First, students acquire in-depth theoretical knowledge of the pathology of the relevant organ systems (cardiology, pulmonology, endocrinology, gastroenterology, rheumatology, nephrology, oncology), then, using this knowledge, they learn the principles of drug therapy for the relevant diseases by analysing clinical cases in clinical pharmacology.

The programme also includes study courses that provide the opportunity to acquire in-depth knowledge necessary to understand, analyse and interpret clinical test results (Pharmaceutical Biochemistry and Biochemical Test Interpretation; Clinical Immunology and Immunopharmacology; Toxicology), as well as courses focusing on pharmacotherapy of specific patients and disease groups (Social Pharmacology; Pharmacotherapy in Anaesthesiology and Intensive Care, Enteral and Parenteral Feeding; Fundamentals of Family Medicine and Care of Specific Patient Groups: Paediatrics, Gerontology, Pregnant Women; Pharmacotherapy of Infectious Diseases and Interpretation of Examinations, Prevention of Hospital-Acquired Infections).

Another group of study courses includes the knowledge and skills to understand, analyse and report on health care indicators, with particular emphasis on aspects of drug therapy evaluation (Public Health and Epidemiology; Pharmacoeconomics). Students are trained to analyse, evaluate, participate in and organise and conduct their own clinical research (Biostatistics; Preparation of Scientific Publications; Clinical Trials, Implementation Thereof).

Through the development of restricted elective courses, students are offered in-depth training in sub-branches of clinical pharmacy (Hospital Clinical Pharmacy; Pharmaceutical Care of Oncology Patients in Inpatient and Outpatient Settings). These courses are designed and led by alumni Aleksandra Bule and Svetlana Buraja, who share their experience and internationally acquired knowledge and skills. As an alternative to the free elective courses, students can learn about the daily tasks of hospital pharmacy and study pain medicine in depth. The task of a clinical pharmacist is to be a team member, so it is important to learn the communication skills that the programme offers in the Communication Psychology course. The Clinical Pharmacy course, designed and delivered by practising specialists from RSU and the University of Tartu, provides up-to-date knowledge and practical skills in the field.

The study courses are based on the main activities of a clinical pharmacist – pharmacotherapy monitoring of chronic patients, polypharmacy and the activity directions included in the European Association of Hospital Pharmacists guidelines under Clinical Pharmacy Services. *“Hospital pharmacists should be involved in all patient care settings to prospectively influence collaborative, multidisciplinary therapeutic decision-making; they should play a full part in decision making including advising, implementing and monitoring medication changes in full partnership with patients, carers and other health care professionals.”*<sup>[1]</sup> Alongside the main task of training specialists for the hospital and outpatient sector, the study programme also promotes the development of skills and competences in research by involving students in research and suggesting relevant Master’s thesis topics. For example, this year, one of the students successfully defended her Master’s thesis on Relationship Between Low-Density Lipoprotein Cholesterol Levels and the Severity and Outcome of COVID-19.

The programme design takes into account the principle that the knowledge and skills acquired at the beginning of the programme are used in the subsequent courses.

Enclosed:

Annex 17.1. Compliance of the Study Programme with the National Educational Standard.

Annex 17.2. Compliance of the Study Programme with the Industry-Specific Regulations.

Annex 18.1. Mapping of the Study Courses for the Achievement of Learning Outcomes of the Study Programme.

Annex 18.2. Compliance of the Qualification to Be Acquired Upon Completion of the Study Programme with the Professional Standard.

Annex 19. Planning of the Study Programme (For Each Type and Form of the Implementation of the Study Programme).

Annex 20. Description of Study Courses.

[1] European Association of Hospital Pharmacists. *The European Statements of Hospital Pharmacy*. <https://statements.eahp.eu/sites/default/files/Commented%20version%20of%20the%20European%20Statements%20.pdf>

**3.2.2. In the case of master's and doctoral study programmes, specify and provide the justification as to whether the degrees are awarded in view of the developments and findings in the field of science or artistic creation. In the case of a doctoral study programme, provide a description of the main research roadmaps and the impact of the study programme on research and other education levels (if applicable).**

The professional Master's study programme has been developed in accordance with the Clinical Pharmacist occupational standard approved on 20.03.2013 and corresponds to level 7 of the European Qualifications Framework. The European Summit on Hospital Pharmacy, held in Brussels on 14-15 May 2014, adopted the European Statements on Hospital Pharmacy, which consists of six sections, one of them on clinical pharmacy, making it an integral part of hospital pharmacy.

The Public Health Guidelines 2021-2027 include pharmaceutical care as a component of primary and secondary health care, carried out by a pharmacist or clinical pharmacist within the scope of their competence. A clinical pharmacist is defined in this document as a pharmacist who performs advisory and supervisory functions in matters relating to the rational use of medicinal products; analyses the consumption of medicinal products and assesses the efficacy of use; carries out expert examination of documents, conducts research and ensures continuing professional development; and provides information and advice in the field of pharmacy.

The current amendments to the Medical Treatment Law (2022) include section Pharmacist's Activities in Health Care and Cooperation With a Medical Practitioner, where a separate Section (53<sup>5</sup>) defines the education and work tasks of a clinical pharmacist.

Based on the above-mentioned national and international acts and providing an opportunity to develop the institution of clinical pharmacists in inpatient and outpatient health care in Latvia, this Master's study programme has been established, which complements the knowledge acquired during the pharmacist's basic education with clinical aspects and allows to learn and acquire in practice the knowledge, skills and competences necessary for professional activity. The national placement and final examinations of the study programme provide an opportunity to fully evaluate what has been learnt and to prove one's professionalism, as evidenced by the professional Master's degree in health care and the qualification of clinical pharmacist. The diploma certifies the ability to

perform one's professional duties in a comprehensive manner.

**3.2.3. Assessment of the study programme including the study course/ module implementation methods by indicating what the methods are, and how they contribute to the achievement of the learning outcomes of the study courses and the aims of the study programme. In the case of a joint study programme, or in case the study programme is implemented in a foreign language or in the form of distance learning, describe in detail the methods used to deliver such a study programme. Provide an explanation of how the student-centred principles are taken into account in the implementation of the study process.**

The study programme is implemented according to a sequential plan of study courses (cycles). Each study course has a defined objective, which is subordinate to the objectives and tasks of the study programme, clearly specified study methods and forms, the organisation of Master's students' independent work, learning outcomes (knowledge, skills and abilities), as well as assessment criteria.

The following teaching methods are used for the study programme: lectures, seminars, practical work, discussions, independent work for the study and analysis of scientific literature, reports and presentations thereof, analysis of clinical cases and problem situations. The study programme is implemented both in RSU classrooms and clinical base units: Pauls Stradiņš Clinical University Hospital, Children's Clinical University Hospital, Riga East Clinical University Hospital (various clinics), Riga Maternity Hospital and Rīga Psychiatry and Narcology Centre, where students can receive practical clinical experience already during theoretical training courses. Thanks to the small number of students, lecturers can pay individual attention to each student.

The programme is successfully completed if the following criteria are met:

- all compulsory and elective study subjects of the current semester (40 CP / 60 ECTS per academic year) are completed;
- only after passing the examinations and theoretical tests at the end of the first academic year are students admitted to further studies for starting their placement and writing Master's thesis.

During the Master's thesis development, Master's students regularly report the results of their work to the teaching staff of the Faculty of Pharmacy.

The study process is organized taking into account the principles of student-centred teaching and learning approach. For example, students are involved in the development and management of the study process. The Head of the study programme aims to individually discuss the benefits and challenges of the study programme with each alumnus, both at organisational and content level. Based on the received feedback, possible changes are made in the study process, actively involving the alumni of the program. 5 alumni are currently involved in the study programme. Students are offered opportunities to engage in scientific projects in the Master's thesis process. For example, a student developed her Master's thesis in the Department of Biology and Microbiology by engaging as one of the main researchers in a group that produced a scientific publication on the very topical subject of possibilities for the use of bacteriophages (see 3.2.6).

**3.2.4. If the study programme envisages an internship, describe the internship opportunities offered to students, provision and work organization, including whether the higher education institution/ college helps students to find an internship place. If the study programme is implemented in a foreign language, provide information on how internship opportunities are provided in a foreign language, including for foreign students. To provide analysis and evaluation of the connection of the tasks set for students during the internship included in the study programme with the learning outcomes of the study programme (if applicable).**

The objective of the clinical pharmacist placement is to consolidate the theoretical knowledge and practical skills acquired during different study cycles of the Master's programme Clinical Pharmacy. Total volume of placement – 26 CP (39 ECTS); 1 CP (1.5 ECTS) corresponds to one week of placement. Total volume of placement – 26 weeks.

Placement is organised according to the principle of consecutive cycles over the period of three study semesters: 8 weeks in the 3rd semester, 10 weeks in the 4th semester, and 8 weeks in the 5th semester. Student placement is organised at RSU clinical base units: Pauls Stradiņš Clinical University Hospital, Children's Clinical University Hospital, Riga East Clinical University Hospital (various clinics), Riga Maternity Hospital and Rīga Psychiatry and Narcology Centre.

Placements are carried out in cooperation with the department of the respective study course; therefore, placements are provided for students in the clinical bases of RSU, which are the leading centres of the respective fields in Latvia. For example, the course National Placement in Clinical Pharmacy (Cardiology) is organised by teaching staff of the Department of Internal Diseases, who also ensure the implementation of part of the theoretical internal diseases cycle: Cardiology (Pathology; Clinical Pharmacology; Examination Methods and Data Interpretation, Symptomatology and Pharmacotherapy), while the national placement in clinical pharmacy (anaesthesiology and intensive care) is provided by teaching staff of the Department of Anaesthesiology and Intensive Care who teach the course Pharmacotherapy in Anaesthesiology and Intensive Care, Enteral and Parenteral Feeding. This placement process is ensured by the fact that all lecturers are also practising specialists and work in leading clinics in their respective fields, where they can practically introduce students to the most up-to-date treatment methods and share their work experience. The fact that the lecturers of the same department provide both theoretical and practical courses contributes to the development of a comprehensive knowledge and skills base, based on a practical patient treatment process involving a team of health care professionals.

In each cycle, the student is required to perform a clinical case analysis, take part in weekly visits and collect information about the clinical unit (or physician's practice) where the placement takes place. The student must prepare a placement logbook. The student's placement ends in the 5th semester with a placement examination. In this examination, the student prepares and presents one clinical case of their choice, demonstrating both their knowledge and skills and describing the place and role of the clinical pharmacist in the treatment process.

The national placement programme of Master's study programme "Clinical Pharmacy" was approved at the Council meeting of the Faculty of Pharmacy on 20 February 2023, Minutes No. 12.1.-7/2013/4.

Enclosed:

Annex 9. Description of the Organisation of Student Placement.



### **3.2.5. Evaluation and description of the promotion opportunities and the promotion process provided to the students of the doctoral study programme (if applicable).**

Not applicable.

### **3.2.6. Analysis and assessment of the topics of the final theses of the students, their relevance in the respective field, including the labour market, and the marks of the final theses.**

Students choose their Master's thesis topic and supervisor in the second year, when they have gotten acquainted with most of the clinical areas and have chosen the area and topic that has generated the most interest. The choice of topics is broadly representative of different disciplines: cardiology, pulmonology, urology, endocrinology, psychiatry, oncology, infectious diseases and intensive care. Most often, Master's theses were developed in the field of cardiovascular diseases, which is recognised as a priority health area in the Public Health Guidelines. Students' research papers enable specialists of the field to understand the problematic areas in the use of drug therapy, which include both patient compliance and the assessment of the potential benefits and risks of therapy. The second most popular area among students is infectious disease therapy and the analysis of the use of antibacterial agents. These are also very topical issues for society and the health sector, both in the context of the pandemic we have just experienced and in the context of antimicrobial resistance control and the prudent use of antibiotics.

In their work, students have prepared information materials for patients and health care specialists, as well as recommendations for monitoring therapy and choosing the way of taking medicines. For example, two alumni used the experience gained in the development of their Master's thesis in further practical and scientific work, developing the publication Experience of Vancomycin Therapeutic Drug Monitoring in Two Multidisciplinary Hospitals in Latvia[1]. In another case, a student produced scientific publication <https://www.mdpi.com/2079-6382/11/12/1706> as part of her Master's thesis.

The evaluation of Master's theses involves the programme lecturers, the academic staff of the faculty, as well as industry professionals representing major clinics, state institutions (the State Agency of Medicines and the Ministry of Health), programme alumni and professional social organisations. The assessment ranges from 4 (almost satisfactory) to 10 points (with distinction). This shows that the assessment criteria are rigorous and that the commission analyses various aspects: professionalism, confidence, relevance to the latest scientific findings and the work invested. After the defence of the Master's theses, the National Examination Board discusses recommendations for adjustments in the programme delivery process (content) in order to promote development of higher quality theses. The 2019 student results were high, but the impact of the pandemic created new challenges that not all students (including supervisors) were able to overcome successfully. It is therefore necessary to continue to support students in the formulation of topics and selection of research methods and to organise regular meetings to check on progress of thesis development.

The national examination in the Clinical Pharmacy study programme has two parts:

1) defence of Master's thesis;



2) national examination – analysis and presentation of a theoretical clinical case.

The Master's thesis defence is regulated by the Regulations on the Elaboration and Defence of the Master's Thesis, and the Master's thesis is assessed by the Master's Thesis Assessment Committee. The decision to award the qualification is taken by the National Examination Board.

At first, the student defends their Master's thesis. During the defence of the Master's thesis, the student presents the relevance of the research, objectives, tasks, research results and conclusions in 15 minutes. After the student's report, the reviewer's written assessment, listening to the answers to the questions, discussing and getting acquainted with the opinion of the thesis supervisor, the commission makes its decision in a closed session by open voting. The thesis is assessed on a 10-point scale.

In the second part of the national examination, the student presents a 15-minute clinical case analysis demonstrating their ability to understand diagnoses, clinical examination findings, analyse them and, based on the information obtained, evaluate the prescribed drug therapy and/or make necessary adjustments and/or identify necessary additional examinations, make recommendations for the patient and nursing staff regarding further drug treatment. The student calculates the cost of the course of treatment using the prices of medicines available from the State Agency of Medicines or the Electronic Procurement System. After the presentation of the clinical case analysis, the student answers the questions of the National Examination Board.

The student receives a random clinical case according to the national examination programme. Clinical cases cover medical disciplines that correspond to the placement sections approved in the national placement programme.

The student carries out the clinical case analysis independently, using all available information: internationally recognised information databases, RSU and other library resources, the website of the State Agency of Medicines, materials acquired during the study process, and other information based on the principles of evidence-based medicine. The student's presentation should demonstrate the ability to find, evaluate and use information on drug treatment options.

Criteria for assessing the analysis and presentation of a theoretical clinical case:

- understanding the patient's clinical data;
- adequacy of the assessment of drug therapy;
- recommendations for drug therapy prepared by the student;
- objectives of drug therapy have been determined and/or understood, which are expected to be achieved as a result of therapy;
- analysis of possible side effects of drug therapy;
- recommendations for the patient and/or carer;
- estimate of therapy costs;
- compliance of the information used with the principles of evidence-based medicine;
- presentation design, speaking skills (speaking with confidence, ability to substantiate one's point of view).

The analysis and presentation of a theoretical clinical case is assessed by the National Examination Board taking into account all the assessment criteria. The thesis is assessed on a 10-point scale.

During the national examination, the student receives two grades – one for the defence of the Master's thesis, the other for the analysis and presentation of a theoretical clinical case. To pass the national examination, both grades must be positive – 4 (almost satisfactory) and above.

Theoretical clinical cases are based on actual clinical cases in different fields, allowing the student to demonstrate their skills, knowledge and competences in analysing these cases, while the

commission can assess the capabilities of the new specialists and see their contribution to improving the treatment process.

Presentations of clinical case analysis are assessed with grades between 4 and 10. The wide range of grades can be justified by the differences in complexity and completeness of information in the actual (practice-based) clinical cases received, as well as the student's courage to substantiate their opinion, point out gaps in the information (missing indicators, required examinations, etc.) and demonstrate skills in the analysis of evidence-based information. To improve students' skills in presenting clinical cases, at the end of the second year students are required to prepare one clinical case presentation (from the parts of the placement already completed), after which the lecturers involved in the programme give advice on how to better prepare for the placement exam and the national examination, while students have the opportunity to practice case analysis preparation and public speaking skills.

The fact that each student's contribution and performance has been objectively assessed is shown by the different assessments in the two parts of the national examination – there are cases when one part scores high and the other lower, and vice versa. The student's ability to substantiate their recommendations and to answer the examination board's questions in a reasoned manner is also important. Students' suggestions often lead to discussions among the board members about the necessary changes in the organisation of treatment work to improve the quality of treatment.

The national examination is designed to enable the student to make full use of the knowledge, skills and competences acquired and to demonstrate the place and role of the clinical pharmacist in the modern health care system.

Enclosed:

Annex 22. Topics and Assessments of Students' Final Papers.

[1] Mauliņa, I., Darbiniece, K., Miķelsone-Jansone, L., Ertis, R., Bandere, D., & Krūmiņa, A. (2022). Experience of Vancomycin Therapeutic Drug Monitoring in Two Multidisciplinary Hospitals in Latvia. *Medicina*, 58(3). <https://pubmed.ncbi.nlm.nih.gov/35334546/>

### 3.3. Resources and Provision of the Study Programme

**3.3.1. Assessment of the compliance of the resources and provision (study provision, scientific support (if applicable), informative provision (including libraries), material and technical provision, and financial provision) with the conditions for the implementation of the study programme and the learning outcomes to be achieved by providing the respective examples.**

The implementation of the study programme involves teaching staff from 15 departments, each of them provides their professional contribution to the students of the programme by giving them the opportunity to learn the perspectives of different professionals on various issues.

Each of the structural units involved in the programme provides the necessary resources for the study process, giving students the opportunity to practice in laboratories (statistics, biochemistry, biology and microbiology), acquire skills in clinical skills, public health and pharmacology departments, and practically analyse drug therapy in clinical base units (for example, Riga East

Clinical University Hospital, Pauls Stradiņš Clinical University Hospital, Riga Maternity Hospital). Extensive access to medical records gives an idea of the variety and complexity of the problems to be solved. Currently, there are major challenges in ensuring that students have access to patient data without compromising the security of personal data, but still ensuring that students are able to receive full information about the treatment process.

Students have the opportunity to undergo placement in other countries as part of the Erasmus programme, which they take advantage of – in academic year 2021/2022, one student did part of her placement in hospitals in the Netherlands and Slovenia. After her return, the student developed and successfully defended her Master's thesis Development and Approval of Prescription Screening Algorithms for Identification of Pharmacotherapy Problems in an Internal Medicine Clinic, where she used her experience to promote the development of clinical pharmacy in Latvia.

Enclosed:

Annex 23.1. Assessment of the Informative and Methodological Provision Regarding Library Resources for the Implementation of the Health Care Study Direction in Accordance With the Requirements of the Guidelines.

**3.3.2. Assessment of the study provision and scientific base support, including the resources provided within the framework of cooperation with other science institutes and higher education institutions (applicable to doctoral study programmes) (if applicable).**

**3.3.3. Indicate data on the available funding for the corresponding study programme, its funding sources and their use for the development of the study programme. Provide information on the costs per one student within this study programme, indicating the items included in the cost calculation and the percentage distribution of funding between the specified items. The minimum number of students in the study programme in order to ensure the profitability of the study programme (indicating separately the information on each language, type and form of the study programme implementation).**

The study programme is planned to be financed from state budget funds and the funds of individuals and legal entities setting the tuition fee in accordance with the state budget funding without social security of EUR 7335 per year of studies. The tuition fee can be subject to discounts in accordance with internal norms and regulations. The number of students planned to be achieved in the study programme in two and a half years of studies is 25 students, enrolling 10 students in the first year, with the number of students remaining the same in the second and third year. Following high inflation and under conditions of a rapid increase in prices of energy sources, the result of the study programme is negative, because there is shortage of funding from state budget funds in accordance with CM Regulations No.994 – study base costs no longer cover infrastructure maintenance costs. The information on additional performance funding allocated, which was approved in the budget of the Ministry of Education and Science, will be available in the second half of 2023.

The funding is used for staff remuneration, attraction of visiting university lecturers, taxes,

maintenance of IT infrastructure, purchase of equipment and devices and study visit costs. In addition to the direct costs of the implementation of lectures and classes, the StP must cover the infrastructure maintenance costs (facilities, IT solutions) and other RSU common resources used in StP (Student Service, Library, organisation of the study process, grant for the Student Union and other support and administrative functions).

StP is implemented by RSU Faculty of Medicine Department of Internal Diseases, Department of Anaesthesiology and Intensive Care, Department of Surgery and Department of Obstetrics and Gynaecology, Faculty of Public Health and Welfare Department of Public Health and Epidemiology and Department of Health Psychology and Pedagogy and Faculty of Pharmacy Department of Pharmacology, Department of Dosage Form Technology and Dean's office of the Faculty of Pharmacy. Remuneration of the academic staff in the first year of StP is planned to be approximately 37 thousand EUR.

The costs per 1 student per academic year in the study programme "Clinical Pharmacy" amount to EUR 9198, while the state budget funding for 1 state-funded place from 1 September 2023 is EUR 8197 and 15 state-funded study places are financed in total. Due to insufficient state budget funding and higher costs per 1 student than revenues, it is not possible to ensure the cost-effectiveness of the study programme.

Table 2. **Information on student costs**

<b>Name</b>	<b>Result with the existing tuition fee</b>
Average income per student, EUR	8565
Average cost per student, EUR	9198
Academic staff, %	48
Department resources, %	3
Other direct expenditure, %	3
Scholarship costs, %	4
Fixed costs, %	3
Overheads, %	39

## 3.4. Teaching Staff

**3.4.1. Assessment of the compliance of the qualification of the teaching staff members (academic staff members, visiting professors, visiting associate professors, visiting docents, visiting lecturers, and visiting assistants) involved in the implementation of the study programme with the conditions for the implementation of the study programme and the provisions set out in the respective regulatory enactments. Provide information on how the qualification of the teaching staff members contributes to the achievement of the**

## learning outcomes.

The study programme involves a large number of teaching staff (more than 60) from 15 departments, which requires precise and continuous planning and monitoring of the programme. This gives students the opportunity to get information and opinions from professionals of different specialties. The lecturers are leading experts and opinion leaders in their fields who are also actively involved in research, 11 of them are professors, 9 are associate professors and 14 are assistant professors. The programme implementation is also ensured by alumni and two visiting lecturers (one of them a visiting assistant professor) from the University of Tartu.

From 1 January 2017 to 1 October 2022, 52 lecturers of Master's study programme "Clinical Pharmacy" participated in continuing education activities of the Centre for Educational Growth for teaching staff attending more than 150 training activities of different content. The lecturers of Clinical Pharmacy study programme spent 4070 academic hours on continuing education activities.

The lecturers participated in the following activities of the Centre for Educational Growth: Creation of Animated Visual Studio Materials; *EndNote* Reference Management Tool; Remote Work of Student Groups With the *Miro* Tool; Collaboration and Partnership Towards Professional and Sectoral Development: Local, National, Transnational; Creating Engaging and Interactive Classrooms Through Active Learning Techniques; Contextualizing the Use of Webinar in Higher Education; Pubmed Database and Its Tools for Searching for Scientific Publications; Capabilities and Comparison of Web of Science and Scopus Databases; Digital Darwinism – What It Means for Us Each and Our Institution; Teaching in Intercultural Environments; Think Tank: How to Assess to Learn?; Creation of Electronic Tests; The Potential of Immersive Technologies for Effective Learning Strategies; Interactive Presentations and Real-Time Feedback in the Mentimeter Tool; Improvisation in Pedagogical Activities; How Games Activate Teaching and Learning; How to Promote the Acquisition of Transversal Skills Relevant to the Working Environment in the Study Process; Research Methodology and Statistical Processing of Data; Visualisation of Content in Presentations; Technology-Enriched Study Process and Many Others.

Alumni of this programme (including current teaching staff) are involved in the development and implementation of a similar programme at the University of Tartu (*Clinical pharmacy e-learning program*, <https://clinicalpharmacy.ut.ee/avaleht>).

Graduates involved in the programme continue to improve their knowledge and share with students both their experience and the latest developments in the field. For example, one of the lecturers (also an alumna) participated in the European Society of Oncology Pharmacists (ESOP) conference with a scientific poster presentation Awareness of Latvian Pharmaceutical Professionals of the Safe Circulation of Dangerous Drugs

<https://www.farmaceutubiedriba.lv/lv/lfb-onkologisko-farmaceitu-sekcija-piedalijusies-starptautiska-konference-hamburga> (Latvian only). Teaching staff (also alumni) participate in the education of health care specialists through publications in the portal and journal that brings together professionals – <https://www.doctus.lv/autori/alina-krivina/> and <https://www.doctus.lv/autori/liga-henke/>.

The lecturers involved in the development and implementation of the programme are highly valued specialists in the field, who have been recognised with awards from the Pharmacists' Society of Latvia <https://www.farmaceutubiedriba.lv/lv/869>. The awards are given for public activities contributing to the development of the pharmaceutical industry.

The most important challenge in the development of teaching staff of the programme is to attract

alumni to the implementation of the programme, providing at least placement management by clinical pharmacists in practice (respectively, so that in the future the placement is managed by clinical pharmacists and not only by physicians as it is now), because currently their number is insufficient to carry out this process.

Enclosed:

Annex 24.6. Declaration on Doctoral Degrees, LCS Experts – Applicable to Doctoral Study Programmes.

Annex 24.7. Analysis of the Composition of Teaching Staff.

### **3.4.2. Analysis and assessment of the changes to the composition of the teaching staff over the reporting period and their impact on the study quality.**

The implementation of the programme (especially during the placement) involves practitioners, including residency students, which allows professionals to build collegial relationships and find the best solutions in the treatment process through discussions. Since a large number of lecturers are involved in the study process, turnover is inevitable; therefore, when coordinating the current study courses, the director of the study programme ensures that teaching staff has consulted the previous lecturer or, if this was not possible, discusses the course, tasks and objectives with the new lecturer.

In the last six years, the programme has been implemented with the participation of associate professor Iveta Kudaba, assistant professor Sigita Kazūne, lecturers Svetlana Buraja (programme alumna), Aleksandra Bule (programme alumna) and Alvis Freimanis. When new lecturers join the implementation of the programme, the director of the study programme always asks for feedback from students with an evaluation of the new lecturers' performance. All of the above-mentioned lecturers received positive evaluations and were recognised as good professionals in their field, able to transfer their experience to students and as responsive lecturers interested in high-quality teaching process.

Due to a change of workplace, Inese Sviestiņa, a long-time lecturer and the first clinical pharmacist in Latvia, has left the programme, however, she ensured that the lectured course was taken over by a very professional colleague (also a clinical pharmacist), assistant professor Inga Urtāne, who has been involved in the implementation of the study course for a long time.

When recruiting new lecturers to the programme, the potential professional contribution and understanding of the role of the clinical pharmacist in a multidisciplinary health care team is assessed so that a collegial environment is already established during the study process.

### **3.4.3. Information on the number of the scientific publications of the academic staff members, involved in the implementation of doctoral study programme, as published during the reporting period by listing the most significant publications published in Scopus or WoS CC indexed journals. As for the social sciences, humanitarian sciences, and the science of art, the scientific publications published in ERIH+ indexed journals or peer-reviewed monographs may be additionally specified. Information on the teaching staff included in the database of experts of the Latvian Council of Science in the relevant field**

**of science (total number, name of the lecturer, field of science in which the teaching staff has the status of an expert and expiration date of the Latvian Council of Science expert) (if applicable).**

Not applicable.

**3.4.4. Information on the participation of the academic staff, involved in the implementation of the doctoral study programme, in scientific projects as project managers or prime contractors/ subproject managers/ leading researchers by specifying the name of the relevant project, as well as the source and the amount of the funding. Provide information on the reporting period (if applicable).**

Not applicable.

**3.4.5. Assessment of the cooperation between the teaching staff members by specifying the mechanisms used to promote the cooperation and ensure the interrelation between the study programme and study courses/ modules. Specify also the proportion of the number of the students and the teaching staff within the study programme (at the moment of the submission of the Self-Assessment Report).**

The study programme is designed as a sequence of integrated courses, so lecturers need to be aware of the work of the other lecturers involved when designing their part of the course. The RSU e-learning environment ensures prompt access to the prepared materials, and the process is supervised by the head of each study course. Cooperation between the heads of study courses is ensured by the director of the study programme, monitoring the updating of study course descriptions. The involvement of the programme's teaching staff is essential in the evaluation of students' placement reports (examinations) and in the pre-defence of Master's theses. These evaluation committees involve teaching staff from different departments who advise students on their Master's theses and meet to discuss areas that need to be emphasised in the study process.

As the number of students in the programme is small, the director of the programme regularly communicates with the students on current issues of the programme and any problem situations are solved by promptly contacting the department and/or lecturer involved in the implementation. Although the number of completed evaluation questionnaires is small, the teaching staff receives information from the director of the programme about necessary improvements in the study process (both in the organisational and content areas). After the national examinations are passed, the director of the study programme discusses with the alumni their recommendations for changes to the programme and implements them as far as possible (new elective courses were created), but not all recommendations can be implemented. In cooperation with the teaching staff, the possibilities to increase practical (clinical) case analysis in theoretical training have been discussed, but the limitations of the pandemic prevented this from being fully implemented, as students had almost no opportunity to visit hospitals in person.

The teaching staff involved in the programme is open to cooperation, as this study programme is small and unique and requires a creative approach from each lecturer, as the required knowledge, skills and competences must be provided through an interdisciplinary approach. Students of the Clinical Pharmacy study programme are demanding because they are familiar with the field of pharmacy and understand the missing clinical knowledge they want to acquire during their studies.

From the above, it can be concluded that the teaching staff and the director of the programme, as well as the students and alumni of the programme, are involved in ensuring cooperation between the teaching staff in order to enhance the quality of the study courses. This model of cooperation allows for prompt adjustments and improvements during the implementation of the study process.

The ratio of students to lecturers in the study programme is 13 students and 67 lecturers. The student-teaching staff ratio is 0.2.



# Annexes

III - Description of the Study Programme - 3.1. Indicators Describing the Study Programme		
Sample of the diploma and its supplement to be issued for completing the study programme	24.1._Diploms_Kliniska_farmacija_eng.pdf	24.1._Diploms_Kliniska_farmacija_lv.pdf
For academic study programmes - Opinion of the Council of Higher Education in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions (if applicable)		
Compliance of the joint study programme with the provisions of the Law on Higher Education Institutions (table) (if applicable)		
Statistics on the students in the reporting period	16_Anx_Stud_statistics_Clinical_Pharmacy.pdf	16_pielik_Kliniska_farmacija_statistika_lv.pdf
III - Description of the Study Programme - 3.2. The Content of Studies and Implementation Thereof		
Compliance with the study programme with the State Education Standard	17.1_Anx_National_educ_standard_Clinical_Pharmacy.pdf	17.1_pielik_MK512_atbilstiba.pdf
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard or the requirements for professional qualification (if applicable)	18.2_Anx_Mapping_prof_standard_Clinical_Pharmacy.pdf	18.2_pielik_Prof_standarta_kartejums_Kliniskais_Farmaceits.pdf
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)	17-2_Anx_regulation_ClinicalFarm.pdf	17-2_pielik_Atb_MK_KlinFarmacija_lv.pdf
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	18.1_St_kursu_StP_rezult_kartejums_Kliniska_farmacija.pdf	18.1_St_kursu_StP_rezult_kartejums_Kliniska_farmacija.pdf
The curriculum of the study programme (for each type and form of the implementation of the study programme)	19_Anx_Plan for full-time studies_Clinical Pharmacy.pdf	19_pielik_StP_planojums_Kliniska_farmacija_03-03-2023.pdf
Descriptions of the study courses/ modules	20_Anx_Study_course_description_Clinical_Pharmacy.pdf	20_pielik_Kursu_apr_Kliniska_farmacija.pdf
Description of the organisation of the internship of the students (if applicable)	9_Anx_Placement_org_Clinical_farm.pdf	9_pielik_Prakses_org_KliniskaFarmacija.pdf
III - Description of the Study Programme - 3.4. Teaching Staff		
Confirmation that the academic staff of the doctoral study programme includes not less than five doctors, of which at least three are experts approved by the Latvian Council of Science in the branch or sub-branch of science in which the study programme intends to award a scientific degree (if applicable)		
Confirmation that the academic staff of the academic study programme complies with the requirements specified in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions (if applicable)		

# Industrial Pharmacy (47725)

Study field	Health Care
ProcedureStudyProgram.Name	Industrial Pharmacy
Education classification code	47725
Type of the study programme	Professional master study programme
Name of the study programme director	Baiba
Surname of the study programme director	Mauriņa
E-mail of the study programme director	Baiba.Maurina@rsu.lv
Title of the study programme director	Dr.pharm.
Phone of the study programme director	
Goal of the study programme	<i>Kopīgās studiju programmas Rūpnieciskā farmācija mērķis ir sniegt iespēju iegūt padziļinātas zināšanas par zāļu formu izstrādi un ražošanu, kvalitātes kontroli, reģistrācijas dokumentācijas izstrādi un izplatīšanu un pētnieciskās iemaņas, kas līdz ar spēju pielietot tās praksē zāļu ražošanas uzņēmumos nodrošinātu rūpnieciskā farmaceita kvalifikāciju.</i>
Tasks of the study programme	<p><i>1) to provide the opportunity to acquire theoretical knowledge of the development, manufacturing process, technology, quality control and distribution of dosage forms;</i></p> <p><i>2) to provide the opportunity to develop critical thinking and the ability to analyse available information, to develop skills in analysing situations encountered in the pharmaceutical industry, to promote an integrated vision and evidence-based decision-making;</i></p> <p><i>3) to create the conditions for collaboration between the two professions, without which a successful pharmaceutical industry is not possible, already in the course of studies, through cooperation between the two institutions of higher education;</i></p> <p><i>4) to contribute to the competitiveness of professionals in the local and EU labour market.</i></p>

Results of the study programme	<p><i>Knowledge:</i></p> <p><i>In-depth knowledge of the development and manufacture of dosage forms, quality control, preparation and distribution of registration documentation.</i></p> <p><i>Skills:</i></p> <p><i>Able to apply research and problem-solving skills to the analysis of situations encountered in the pharmaceutical industry.</i></p> <p><i>Competence:</i></p> <p><i>Able to fit into an interdisciplinary team, associate oneself with team goals and contribute to the achievement of common goals.</i></p> <p><i>Able to integrate the theoretical knowledge acquired in pharmaceutical and industrial pharmaceutical studies, as well as, if necessary, to expand the knowledge independently in order to solve problems and justify one's opinion.</i></p> <p><i>Able to find, select, analyse and use scientific literature, prepare a scientific literature review, carry out data processing, collect the information obtained, critically analyse it, provide own assessment and present the results.</i></p> <p><i>Able to evaluate the degree of evidence of data and decide on further action.</i></p>
Final examination upon the completion of the study programme	<i>National Examination</i>

## Study programme forms

### Full time studies - 1 years, 6 months - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	<i>1</i>
Duration in month	<i>6</i>
Language	<i>latvian</i>
Amount (CP)	<i>60</i>
Admission requirements (in English)	<i>Higher education in pharmacy (pharmacist's degree or Master's degree of health sciences in pharmacy)</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	<i>-</i>
Qualification to be obtained (in english)	<i>Industrial Pharmacist</i>

### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

**Full time studies - 1 years, 6 months - english**

Study type and form	<i>Full time studies</i>
Duration in full years	<i>1</i>
Duration in month	<i>6</i>
Language	<i>english</i>
Amount (CP)	<i>60</i>
Admission requirements (in English)	<i>Higher education in pharmacy (pharmacist's degree or Master's degree of health sciences in pharmacy) Studies in English require knowledge of English of at least B2.</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>Industrial Pharmacist</i>

**Places of implementation**

<b>Place name</b>	<b>City</b>	<b>Address</b>
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

### 3.1. Indicators Describing the Study Programme

**3.1.1. Description and analysis of changes in the parameters of the study programme made since the issuance of the previous accreditation form of the study field or issuance of the study programme license, if the study programme is not included on the accreditation form of the study field, including changes planned within the evaluation procedure of the study field evaluation procedure.**

Table 1. Changes in StP parameters

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period (until 2022)	Planned changes within the assessment procedure (after the accreditation)
1.	Study direction	—	—
2.	Title of the StP	—	—
3.	Code according to the Latvian Education Classification	—	<i>The programme code should be changed from 46725 to 47725 because the programme is implemented after second level professional higher education (47 – second level professional higher education (professional Master's degree or fifth level professional qualification), to be implemented after obtaining either a Bachelor's, professional Bachelor's degree or the fifth level professional qualification. The duration of full-time studies is at least one year. The total duration of full-time studies is five years.</i>

<b>No.</b>	<b>Parameter</b>	<b>Description and analysis of changes in StP parameters during the accreditation period (until 2022)</b>	<b>Planned changes within the assessment procedure (after the accreditation)</b>
4.	Head of the StP	Until 2022, the StP at RTU was headed by Professor Māra Jure, but since 2022 the StP is headed by Assistant Professor Inese Mieriņa	—
5.	Scientific degree of the head of the StP	—	—
6.	Objective of the StP	—	—
7.	Tasks of the StP	—	—
8.	Learning outcomes to be achieved	—	—
9.	Final examination upon the completion of the StP	—	—
10.	Type and form of studies	—	—
11.	Duration of implementation	—	—
12.	Language of implementation	—	—
13.	Workload of the StP (CP)	—	—

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period (until 2022)	Planned changes within the assessment procedure (after the accreditation)
14.	Admission requirements	With ac. year 2021/2022, an update to admission conditions was approved by a Senate decision: from "level 2 professional higher education in pharmacy (pharmacist's degree) or equivalent higher education" to "Higher education in pharmacy (pharmacist's degree or degree of the Master of health sciences in pharmacy)". The update was required because applications with a Bachelor's degree in pharmacy, which is not a sufficient undergraduate education, were received for admission to studies in the programme "Industrial Pharmacy".	
15.	Degree to be awarded	—	—
16.	Qualification to be awarded	—	—
17.	Place of implementation	—	—

Since the last accreditation, there have been no significant changes in the parameters of the study programme, admission requirements have been updated and the new head of the study programme successfully started working at RTU (see Table 1). Both RTU and RSU have agreed that the objective of the study programme and the learning outcomes are similar in terms of content, however, since RTU implements 10% of the study programme's volume, and RSU is the leading university in the implementation of the study programme, which admits students and issues the diploma, then both Universities' definitions of the objective and learning outcomes of the study programme differ. RTU has confirmed (in letter No. 01R00-1.2-e/1775 written by E. Gaile-Sarkane

on 03.10.2023.) that it agrees with the objective and learning outcomes of the study programme submitted by RSU. RTU has confirmed that it will start the procedure for Assessing Changes to Accredited Study Field to ensure the implementation of the study program "Industrial Pharmacy" in English.

New study courses have been included in the study programme since the last accreditation: in accordance with the Civil Protection and Disaster Management Law, a study programme must include a study subject on civil protection matters, therefore from ac. year 2018/2019 the study course "Civil Defence and Environmental Protection" in the amount of 2 CP / 3 ECTS has been included in the elective part of the study programme. Due to the difficulties encountered by students in writing and submitting research papers within the expected deadline, the course "Preparation of Scientific Papers" (2 CP / 3 ECTS) has been included since ac. year 2021/2022, which will facilitate the process of writing research papers for students, including the creation of a study design and the interpretation of data. The study course "The Chemistry and Technology of Medicinal Substances (selected chapters)" implemented by RTU has been removed from the list of compulsory courses, as the content of the course overlaps partly with that of undergraduate courses. The range of elective courses of the programme has been complemented with the course "Drug Development" (2 CP / 3 ECTS). In the academic year plan for 2023/2024, this optional course will be replaced by the course "Drug Research and Development".

The accreditation of RTU study programmes preceded the accreditation of RSU (2022), the programme received an "outstanding" assessment, however experts had several recommendations. One indicates that students lack possibilities to choose because only 2 CP / 3 ECTS are allocated for elective courses. To make room for the implementation of other 2 CP / 3 ECTS elective courses, the duration of placement will be reduced by 2 weeks (2 CP / 3 ECTS) from ac. year 2023/2024.

**3.1.2. Analysis and assessment of the study programme compliance with the study field. Analysis of the interrelation between the code of the study programme, the degree, professional qualification/professional qualification requirements or the degree and professional qualification to be acquired, the aims, objectives, learning outcomes, and the admission requirements. Description of the duration and scope of the implementation of the study programme (including different options of the study programme implementation) and evaluation of its usefulness.**

The name of the study programme, the degree to be acquired, professional qualification or degree and professional qualification, aims, objectives, learning outcomes and admission requirements of the study programme are interrelated.

The second level higher education study programme "Industrial Pharmacy" is implemented in close synergy between Riga Technical University (RTU) and Rīga Stradiņš University (RSU). As the title of the study programme "Industrial Pharmacy" suggests, graduation from the programme ensures mastering of skills on various matters related to the circulation of biologically active substances, which include both basic knowledge of the development of new pharmaceutical substances, large-scale manufacturing, as well as in-depth competences regarding the development and manufacture of dosage forms, quality control, development and distribution of authorisation documentation, which may be effectively used during placement in pharmaceutical companies. The programme develops an integrated vision needed by an industrial pharmacist for all disciplines related to drug



development. An in-depth analysis of **learning outcomes** of the study programme “Industrial Pharmacy” during mapping (see Annexes 18.1 and 18.2) shows that graduates will have acquired the necessary knowledge, skills and competences to enable them to understand and participate in the entire medicinal product development and manufacturing cycle. Students develop research skills in solving problems in the pharmaceutical industry.

The learning outcomes of study courses are reflected in the **learning outcomes of the study programme**, which conform to the knowledge, skills and competences of an industrial pharmacist referred to in the profession standard and are certified with the acquisition of the professional qualification “Industrial Pharmacist”:

- 1) in-depth knowledge of the development and manufacture of dosage forms, quality control, development and distribution of authorisation documentation;
- 2) ability to apply research and problem-solving skills to the analysis of situations in the pharmaceutical industry;
- 3) ability to fit into an interdisciplinary team, associate oneself with team goals and contribute to common goals;
- 4) ability to integrate theoretical knowledge acquired during pharmacy and industrial pharmacy studies and, if necessary, to supplement knowledge independently to solve problems and to substantiate own opinion;
- 5) ability to find, select, analyse, use and collect scientific literature, process data, summarise information obtained, critically analyse it, provide own assessment and present results;
- 6) ability to assess the degree of evidence of the data and decide on further actions.

The learning outcomes of the study programme indicate that the programme prepares specialists – industrial pharmacists – with in-depth knowledge on the development and manufacture of dosage forms, quality control and preparation and circulation of authorisation documents. Graduates of the study programme are not only competent in their field, but also strong team members and managers, are able to solve problems, analyse large amounts of data and latest scientific literature, as well as patent materials, assess the credibility of evidence and incorporate the latest scientific achievements in the company’s operations (for example, the work of graduates referred to in Chapter 3.1.3).

The programme has been created to enable the acquisition of knowledge and the development and reinforcement in practice of skills and competences to enable the graduate to engage in the whole drug circulation process, from the development and manufacture of pharmaceutical products to authorisation and distribution. All knowledge and learning outcomes theoretically acquired in study courses are reinforced in study placement in leading pharmaceutical companies. Placement in pharmaceutical companies is the main reason why the study programme has been implemented only in Latvian so far, even though it is also accredited for implementation in English. As mentioned in chapter 3.1.4., the involvement of international students in companies is an additional burden for those employed there. When the Laboratory of Finished dosage forms with an international team of researchers starts to work, it will be possible to offer placement in the field of industrial pharmacy in RSU. Admission of international students is a prerequisite for further development of the programme, which will provide the Laboratory of Finished dosage forms with potential employees as well. There is also a shortage of employees in pharmaceutical companies, which would make the programme’s graduates who have studied in English interesting for pharmaceutical manufacturers. RTU also confirms that it will start the procedure for Assessing Changes to Accredited Study Field to ensure the implementation of the study programme “Industrial Pharmacy” in English.

Currently, all students in the Industrial Pharmacy programme study receive state budget funding. There are also full fee places in the programme, but there are currently no full fee paying students.

Industrial pharmacy is an integrated area that includes development, manufacturing, marketing and distribution of medicinal and pharmaceutical products, and has contact points with engineering and economics. Thus, the mastering of the joint study programme requires prior knowledge in organic, inorganic, analytical, medical chemistry, dosage form technology, pharmacology, pharmacotherapy, pharmaceutical law, practical pharmacy, so students with higher education in pharmacy are enrolled to the joint study programme (a previous education document certifies that a pharmacist's degree or a degree of the Master of Health Sciences in pharmacy has been obtained). Such an admission criterion is set because the lack of basic knowledge in pharmacy can be a significant barrier for a student to participate effectively in studies.

The study programme "Industrial Pharmacy" is implemented as a full-time intramural study programme. The duration of studies is 1.5 years, which correspond to 60 CP. Semester 1 of the study programme intends to provide courses, which provide theoretical knowledge of the field and the newest scientific knowledge, while in semester 2 and 3 theoretical knowledge acquired is strengthened in the working environment – drug manufacturing companies. Placement in industrial pharmacy and a research project, which are carried out in leading pharmaceutical companies and are the logical conclusion of studies, play an important role in industrial pharmacist's studies.

After successfully concluding studies in the second level higher education study programme "Industrial Pharmacy", the graduate is awarded the professional qualification of an industrial pharmacist.

Until now the study programme code was 46725. Regulations of the Cabinet of Ministers No. 322<sup>[1]</sup> (hereinafter referred to as [CM 322](#)) provide that code 46 refers to second level professional higher education (fifth level professional qualification) to be implemented after the acquisition of a Bachelor's degree, a professional Bachelor's degree. The length of full-time studies is at least one year. The total duration of full-time studies is at least four years. Until these regulations were amended, the code was appropriate, however, these regulations were amended<sup>[2]</sup> and **a more accurate code should be used further - 47**. It characterises the second level of professional higher education (professional Master's degree or fifth level professional qualification), which is to be implemented after obtaining either a Bachelor's, professional Bachelor's degree or the fifth level professional qualification. The length of full-time studies is at least one year. The total duration of full-time studies is five years.

The part of the code "725" characterises the group of educational programmes – "Pharmacy" ([CM 322](#)). Therefore, the new code of the study programme 47725 characterises the study programme in the most relevant and appropriate way because it is a short professional programme, which provides the professional qualification of an industrial pharmacist.

Thus, level 5 professional qualification "Industrial Pharmacist" is to be obtained after mastering the programme in accordance with admission requirements, aim and tasks, learning outcomes, as well as the title and code of the study programme, and shows the interlinking between these indicators.

Enclosed:

Annex 24.1. Sample diploma and supplement thereto.

Annex 24.8. Sample study contract.

<sup>[1]</sup> Regulations of the Cabinet of Ministers No. 322 (adopted on 13 July 2017) "Regulations on the Classification of the Latvian Education".

<https://likumi.lv/ta/id/291524-noteikumi-par-latvijas-izglitiba-klasifikaciju>

[2] Regulations No. 990 (2 December 2008) “Regulations on the Classification of the Latvian Education” ceased to be valid on 01.06.2017 and Regulations of the Cabinet of Ministers No. 322 entered into force.

### **3.1.3. Economic and/ or social substantiation of the study programme, analysis of graduates' employment.**

The joint implementation of the interuniversity study programme “Industrial Pharmacy” of RTU and RSU has several levels of economic and/or social rationale. The joint implementation of the study programme ensures efficient use of the resources and infrastructure at the disposal of both universities. For example, the RTU Faculty of Material Science and Applied Chemistry (FMSAC) has the infrastructure and equipment necessary to learn the matters related to the synthesis and production of pharmaceutical substances. The equipment of RSU Department of Applied Pharmacy and the future Laboratory of Finished Dosage Forms (LFDF) allows skills related to the development and analysis of finished dosage forms to be acquired. Both the RSU and RTU employ high-level academic staff – professors, who can provide a study course related to the matters of producing pharmaceutically active substances and dosage forms based on the latest scientific achievements in the field. It should also be noted that the implementation of the joint study programme also allows the capacity and time resources of academic staff to be used effectively: some of the compulsory study courses included in the joint study programme “Industrial Pharmacy” are also included as compulsory study courses in the study programmes implemented by RTU Faculty of Materials Science and Applied Chemistry. Since the study programme “Industrial Pharmacy” has a relatively small number of students and a small number of students of the Faculty of Materials Science and Applied Chemistry choose these elective courses, it is possible to plan the study process effectively and provide these study courses to students of several study programmes and higher education institutions at the same time. The joint implementation of study courses saves students of several programmes not only financial resources, but also allows for the reduction of infrastructure load, as well as creates preconditions for cooperation of students of different specialities, which is important for the pharmaceutical industry. In the long term, simultaneous implementation of study courses for students of different study programmes of different higher education institutions may promote cross-sectoral cooperation in their professional activities in the future, which could potentially create products with high added value and promote economic development of Latvia.

Latvia has developed pharmaceutical industry and pharmaceutical science. It should be emphasised that RTU FMSAC and RSU Faculty of Pharmacy (FF) have developed very good cooperation with industry both in the study process, for example, classes for students take place in cooperation with drug manufacturers (A/S “Grindeks”, A/S “Olainfarm”, LMP, etc.) and in placement. Pharmaceutical products play an important role in Latvia’s export market. And this market keeps growing, for example, in 2021, pharmaceutical companies exported goods worth more than 560 million euros.

([https://eksports.csb.gov.lv/lv/years/products-selected/export/2021/TOTAL-sp\\_24/TOTAL](https://eksports.csb.gov.lv/lv/years/products-selected/export/2021/TOTAL-sp_24/TOTAL)). As the export market as well as the domestic market continues to expand and the quality monitoring requirements for pharmaceutical products are increasing, there is increasing demand for specialists who can monitor pharmaceutical preparation development and quality control processes, as well as prepare documentation and communicate effectively with institutions supervising the industry. The study programme “Industrial Pharmacy” prepares specialists who can prepare a package of

authorisation documents for medicinal products in pharmaceutical companies. Graduates of the study programme “Industrial Pharmacy” work in their speciality in the leading companies of the sector. Interviews with graduates of the programme and employer references are available, for example: <https://www.rsu.lv/aktualitates/lai-top-zales>, <https://www.rsu.lv/en/news/pharmacist-oxana-brante-studying-anti-ageing-treatment>, <https://www.rsu.lv/aktualitates/rupnieciska-farmacija-ka-modernas-izglitiba-piemers>, <https://www.profesijupasaule.lv/intervija-rupnieciskais-farmaceits>, <https://www.lsm.lv/raksts/zinas/latvija/daudzi-mediki-apgust-papildu-specializaciju.a495833/>. The demand for graduates of this study programme is also confirmed by job vacancies of different companies. These companies are looking for specialists with knowledge and skills in manufacturing of pharmaceutically active substances.

Employers are involved in the implementation of courses and placement of the study programme, as well as participate in the National Examination Board. The national degree examination includes defending a research paper and analysing and presenting a problem situation in industrial pharmacy. Almost all research papers are prepared in drug manufacturing companies, and their results will be used by drug manufacturers in their practice. Problem situations are created by representatives of drug manufacturers and students demonstrate their ability to analyse available information, gain the skills to analyse situations in the pharmaceutical industry, develop an integrated vision and the ability to make evidence-based decisions. Representatives of the two largest pharmaceutical companies of Latvia – A/S “Grindeks” and A/S “Olainfarm”, as well as the Industrial Pharmacists section of the Pharmacists’ Society of Latvia – participate in the National Examination Board and appreciated the importance of the programme for the preparation of highly sought-after highly qualified specialists for pharmaceutical companies of Latvia. According to them, both the National Degree Examination, presentations of research projects and solutions to problem situations show that students will be able to help solve problems that may arise in drug manufacturing, in accordance with the law and with responsibility for the patient.

In the study programme “Industrial Pharmacy”, a survey is organised electronically at the end of each study course and study programme. Since students of this programme are not actively involved in the completion of questionnaires, the limited number of students also allows for individual talks with students, as a result of which it has been concluded that the organisation and conduct of placement needs to be improved, talks are necessary with drug manufacturers – providers of placement to facilitate integration of the student into the employee team of the drug manufacturing company. Since all students are working, there is a strong desire to organise their studies on working day evenings and Saturdays, which is done as far as possible. The fact that graduates are 100% employed leads to the conclusion that employers appreciate the graduates and offer jobs already during studies and placement.

#### **3.1.4. Statistical data on the students of the respective study programme, the dynamics of the number of the students, and the factors affecting the changes to the number of the students. The analysis shall be broken down into different study forms, types, and languages.**

The implementation of the study programme started in ac. year 2015/2016, students are enrolled annually, but from 2018 onwards, enrolment is organised every other year, enrolling to the Master’s level programme “Clinical Pharmacy” in one academic year and to the programme “Industrial Pharmacy” next year. Thus, both RSU FF Master level programmes concentrate potential applicants

who do not compete with each other and meet the industry's demand for clinical and industrial pharmacy specialists, but do not create a situation where more specialists are prepared than is actually needed in the labour market. Up to 6 applicants may be admitted to the study programme to state-funded study places and 5 study places are covered by natural and legal persons. On average, 5 applicants start studying in the study programme each academic year (if there has been enrolment to the study programme in the given year). Interest in the study programme tends to increase. So far, 17 students have graduated from the programme, accounting for 50% to 100% of all students enrolled in the corresponding academic years.

There has been no incoming/outgoing mobility during the reporting period. All students in the study programme "Industrial Pharmacy" work, and this makes it difficult to participate in outgoing mobility, while incoming mobility is hampered by the fact that the research project and placement, in which potential incoming students are most interested in, takes place in drug manufacturing companies. Engagement of international students in companies is an additional burden for their employees. The incoming student mobility could increase when the Laboratory of Finished Dosage Forms starts operating. It will then be possible to offer both placement and industrial pharmaceutical research in the RSU structural unit. Until now, the study programme has been implemented only in Latvian for the reasons mentioned above.

Enclosed:

Annex 16. Statistical Data on Students.

### **3.1.5. Substantiation of the development of the joint study programme and description and evaluation of the choice of partner universities, including information on the development and implementation of the joint study programme (if applicable).**

The creation of the study programme "Industrial Pharmacy" was initiated by employers – Latvian drug manufacturing companies and the Association of the Latvian Chemical and Pharmaceutical Industry. Industrial pharmacy is an integrated area that includes development, manufacturing, marketing and distribution of medicinal and pharmaceutical products, and has contact points with engineering and economics, so it is natural for this study programme to be developed in close cooperation between RSU, which provides a range of different healthcare programmes, and RTU, the leading technical and engineering university in the Baltics. The study programme "Industrial Pharmacy" is an excellent example of synergy of universities to prepare specialists with cross-sectoral skills that employers need – graduates of the programme have the necessary knowledge in the manufacture of active pharmaceutical substances (i.e. in the field of chemical engineering) and the skills related to the inclusion of pharmaceutical substances in finished dosage forms and the preparation of documentation for authorisation of medicinal products (i.e. medical base sciences, including pharmacy).

When creating the joint study programme "Industrial Pharmacy", each of the partner higher education institutions provides such study courses for teaching of which it has the necessary competence. RSU is the leading university in Latvia that prepares specialists in various healthcare fields, and pharmacy is one of the components of the Smart Specialisation Strategy (RIS3), which provides additional opportunities for various pharmaceutical and medical research, which in turn facilitates the development of pharmaceutical science and involvement of students in research. The leading positions of Riga Technical University in the field of organic chemistry (especially synthesis of biologically active compounds) and chemical technology are confirmed by the publications of its

academic staff in the leading journals of the industry, the implemented fundamental science grants and cooperation agreements with leading pharmaceutical companies in Latvia and abroad. These competences of teaching staff make it possible to ensure the implementation of study courses, taking into account the latest developments in the scientific sector. It should be noted that RTU is the only university in Latvia and Baltic States that ensures the preparation of specialists in chemical technology, which also integrates chemical aspects and forms an interdisciplinary vision for various branches of the chemistry, chemical technology and material science. Thus, the creation of the joint study programme “Industrial Pharmacy” between these two universities was a natural continuation to prepare specialists pharmaceutical companies are short of, involving the best teaching staff in the implementation of the study programme.

RSU provides study courses related to the matters of manufacture of finished dosage forms, authorisation and marketing – “Finished Dosage Forms” (8 CP / 12 ECTS), “Good Manufacturing Practice” (2 CP / 3 ECTS), “Registration of Medicinal Products” (2 CP / 3 ECTS), “Pharmaceutical Marketing” (2 CP / 3 ECTS), “Civil Defence and Environmental Protection” (2 CP / 3 ECTS), “Preparation of Scientific Papers” (2 CP / 3 ECTS), “Drug Development” (2 CP / 3 ECTS), “Clinical Trials and Implementation” (2 CP / 3 ECTS). RSU ensures placement in industrial pharmacy in cooperation with drug manufacturers (24 CP / 36 ECTS). RTU ensures study courses related to chemical technology processes, chemical manufacturing aspects, as well as synthesis of biologically active compounds: “Technology of Pharmaceutical Preparations” (4 CP / 6 ECTS) and “Patenting science” (2 CP / 3 ECTS), and also the elective study course “Nanotechnology in Administration of Therapeutic and Diagnostic Preparations” (2 CP / 3 ECTS). Students’ knowledge is assessed based on the criteria accepted in both cooperating universities. Students are informed about the assessment criteria at the beginning of each study course, and the information is available in the study course description.

In accordance with the agreement on the creation and implementation of the study programme (agreement on the development and implementation of the joint study programme “Industrial Pharmacy” was concluded in Riga on 29 August 2014), matriculation of students, preparations of diplomas and diploma supplements is ensured by RSU.

Enclosed:

Annex 15. Compliance of the joint study programme with the requirements of the Law on Higher Education Institutions.

## **3.2. The Content of Studies and Implementation Thereof**

**3.2.1. Analysis of the content of the study programme. Assessment of the interrelation between the information included in the study courses/ modules, the intended learning outcomes, the set aims and other indicators with the aims of the study course/ module and the aims and intended outcomes of the study programme. Assessment of the relevance of the content of the study courses/ modules and compliance with the needs of the relevant industry, labour market and with the trends in science on how and whether the content of the study courses/ modules is updated in line with the development trends of the relevant industry, labour market, and science.**

The RSU and RTU joint second level professional higher education study programme “Industrial Pharmacy” was created in accordance with the explanation provided in Regulations of the Cabinet of Ministers No. 512 of 26 August 2014 “Regulations on the National Standard of the Second Level Professional Higher Education”: “Short professional programme implemented after completion of academic (Bachelor’s or Master’s) education or second level professional higher education”. The **aim** of the joint study programme “Industrial Pharmacy” is to provide an opportunity to acquire in-depth knowledge regarding the development and manufacture of dosage forms, quality control, development and distribution of authorisation documentation and research skills which, together with the ability to apply them in practice, would ensure the qualification of an industrial pharmacist in drug manufacturing companies.

Graduates of the study programme “Industrial Pharmacy” will have acquired the necessary knowledge, skills and competences to enable them to understand and participate in the entire medicinal product development and manufacturing cycle (learning outcomes of study courses show this clearly).

- Students will acquire basic knowledge and competences in the creation of new medicines, as well as their legal aspects, and will also be able to explain to patients the processes involved in the development of medicines.
- Students will know the conduct of clinical trials, will be able to judge on the results of clinical trials.
- Students will have an understanding of the theoretical principles of large-scale synthesis and the essential requirements for pharmaceutical substances manufacturing facilities, as well as the basic principles of good manufacturing practice in drug manufacturing. They will acquire the necessary skills to make it possible to select, develop and introduce in production the final dosage form of the medicinal product most suitable for the active pharmaceutical substance and intended end-use. In addition, graduates will have the necessary competences to be involved in the preparation of documents for the authorisation of medicinal products.
- Students will be familiar with the state-of-the-art ways of delivering pharmaceutical substances: they will find their way in nanotechnology principles with regard to finished dosage forms, delivery nanoforms, nanotechnology methods in pharmacy, cosmetics and diagnostics.
- Students will not only gain knowledge on the aspects of drug manufacturing and research but will also have competences in the process of selling pharmaceutical products, including legal and ethical aspects, as well as the principles of organisation and supervision.
- As protection of intellectual property rights also plays an important role in the pharmaceutical field, the mastering of this study programme will also provide expertise in types of intellectual property, with particular attention to specific chemical and pharmaceutical matters. Students will acquire skills in patent searching and preparation of patent claims.
- Learning the study programme, preparing qualification papers, etc. will develop academic writing skills in graduates that will help them describe, analyse and interpret experimental results.

The theoretical courses of the study programme provide skills not only in the manufacture of pharmaceutical preparations, their incorporation into finished dosage forms, the field’s latest scientific knowledge and good manufacturing practice, but also in medicinal products authorisation matters, scientific writing and pharmaceutical marketing. In addition, matters relating to the protection of intellectual property must be studied in the courses of the compulsory part. To prepare these specialists for work in pharmaceutical companies, a substantial part of studies is devoted to practice and research, which is organised in close cooperation with the leading

companies in the sector. The placement programme is designed in accordance with the specifics of the work of an industrial pharmacist and aims to strengthen theoretical knowledge and practical skills of students in accordance with the requirements of the Industrial Pharmacist's profession standard.

The programme has been created at the request of Latvian manufacturers of medicinal products with the support of the Association of the Latvian Chemical and Pharmaceutical Industry, specialists of A/S "Grindeks" are involved in the implementation of the courses "Good Manufacturing Practice", "Finished Dosage Forms", students' placement takes place in A/S "Grindeks" and A/S "Olainfarm", representatives of both manufacturers of medicinal products participate in the work of the national examination board. Topic of research papers are also initiated by drug manufacturers, but there are cases where they are linked to the company's privacy policy and therefore are not made public and the research paper is defended at a closed commission meeting. The topics of research papers of all graduates of 2021 were proposed by A/S "Olainfarm" and developed under the guidance of the company's specialists, while the topics and paper supervisors of all graduates of 2023 were delegated by A/S "Grindeks," which demonstrates both the interest of companies and compliance of the programme with the needs of the labour market. The involvement of A/S Grindeks specialists in the implementation of the courses "Good Manufacturing Practice" and "Finished Dosage Forms" demonstrates that the content of the courses complies with industry and labour market requirements.

Enclosed:

Annex 17.1. Compliance of the Study Programme With the National Educational Standard.

Annex 17.2. Compliance of the Study Programme With the Industry-Specific Regulations.

Annex 18.2. Compliance of the Qualification to Be Acquired Upon Completion of the Study Programme With the Professional Standard.

Annex 19. Planning of the study programme (for each type and form of the implementation of the study programme).

Annex 20. Description of Study Courses.

Annex 18.1. Mapping of the Study Courses for the Achievement of Learning Outcomes of the Study Programme.

**3.2.2. In the case of master's and doctoral study programmes, specify and provide the justification as to whether the degrees are awarded in view of the developments and findings in the field of science or artistic creation. In the case of a doctoral study programme, provide a description of the main research roadmaps and the impact of the study programme on research and other education levels (if applicable).**

**3.2.3. Assessment of the study programme including the study course/ module implementation methods by indicating what the methods are, and how they contribute to the achievement of the learning outcomes of the study courses and the aims of the study programme. In the case of a joint study programme, or in case the study programme is implemented in a foreign language or in the form of distance learning, describe in detail**



**the methods used to deliver such a study programme. Provide an explanation of how the student-centred principles are taken into account in the implementation of the study process.**

Both formative and summative assessment is used in the studies at RSU. Formative assessment takes place during everyday study process: by asking control questions to the students during the contact lessons, as well as by discussing the independent works of students that are practised during the study process. Summative assessment takes place at the conclusion of each study course. Summative assessment tests are organised in a written form (in paper format or electronically) or as oral discussions, or also in a mixed form. Individual assessments of interim and final examinations of study courses are available to each student on their student profile in the RSU e-learning environment. Students can familiarise themselves with the criteria, conditions and binding procedures for the assessment of academic performance in the RSU Academic Regulations I (available in [Latvian](#) and [English](#)). The RTU Faculty of Material Science and Applied Chemistry also implements the principles of student-centred education, i.e. provides a variety of support mechanisms for students to achieve the aims set out in the study courses. During the first class, RTU students are familiarised with the requirements for successful study course mastering, and this information can also be found on the ORTUS study course website. All study materials available electronically to students are also available on the ORTUS website. It is possible to receive consultations regarding the unclear matters of the study course at a specially reserved time. Also using the ORTUS environment, it is possible to communicate in writing with the lecturer implementing the study course. To control the acquisition and progress of study courses, students need to do homework and test works. A student then receives feedback on the results achieved in independent work, which enables him or her to understand in which matters he or she needs to supplement his or her knowledge.

In accordance with the epidemiological situation, studies are organised in classrooms or remotely. Both RSU and RTU have lectures available online or in the video format in the e-learning. E-learning also includes different additional materials – self-tests, interactive tasks, tasks for resolving situations found in the industry. The tasks of RSU visiting professor A. Juppo from the University of Helsinki in the course “Finished Dosage Forms” – creating a formulation of a dosage form, taking into account physical and chemical properties of the active substance – should be specifically mentioned. Since an industrial pharmacist is both a team member and a manager, classes during several placement seminars are devoted to leadership: *Human relationship and interaction skills of leader; Skills in communication between the leader and the subordinate; Conflicts and their handling; How to create good working atmosphere – game rules; Motivation*, because Professor Juppo has been working in pharmaceutical companies for many years and is able to provide students with these competences.

In order to maintain and improve the quality of the StP and its compliance with the labour market needs, mechanisms helping to receive feedback from students and enabling students to participate in StP quality monitoring have been established – to express opinions and suggestions regarding the content of study courses, their implementation methods, competences and working style of teachers. 25–50% of students completed questionnaires in the study programme “Industrial Pharmacy”. Since the number of students is not high, they do not provide the possibility of objectively evaluating student satisfaction. Since ac. year 2022/2023, RSU introduced amendments to Academic Regulations, which provide that students must complete questionnaires. After the survey, the head of the study course, the head of the department and the head of the StP analyse the results of the surveys and provide their feedback on the student portal. Lecturers of

departments of the Faculty of Pharmacy provide 100% feedback. The survey results are also discussed at department meetings every semester, deciding on the issue of improvement measures, for example, on the planned topics. To improve surveying, a new survey was created, which has been coordinated also with the Student Union and is available for filling out from the spring study semester of 2022. In addition, a survey on the study programme is carried out in which graduates express their opinion on the programme. On average 25% of graduates complete questionnaires about the StP. The results of the questionnaire are evaluated at Council meetings of the Faculty of Pharmacy with participation of students, lecturers, employers and management of the Pharmacists' Society of Latvia.

RTU's internal regulations provide that surveys are organised for each course twice a semester (at the end of the semester and in the middle of the semester). During surveys, students are asked to answer various questions about the progress and quality of the study process, and they can also suggest improvements or changes to be made in a free form in the comments section. The survey results received are analysed and discussed at different levels (in individual talks with the lecturer, at meeting of the structural unit implementing the study course, study direction commissions). After analysis of the results, it is decided on the necessary changes in the study course, which are reviewed after receipt of the results of the repeated survey (in the next semester when the particular study course is implemented) and it is decided on the effectiveness of the changes made. Students may make suggestions regarding changes and improvements to the course not only during surveys, but at any time by contacting the director of the study programme or the management of the structural units or the Student Union.

An example of a student-centred education is a multiple presentation of the research paper to the lecturers involved in the programme to demonstrate progress in the development of the paper and listen to the recommendations of specialists. This practice has been introduced because students experience difficulties with time planning and difficulties in submitting papers within the prescribed time limits during their studies.

**3.2.4. If the study programme envisages an internship, describe the internship opportunities offered to students, provision and work organization, including whether the higher education institution/ college helps students to find an internship place. If the study programme is implemented in a foreign language, provide information on how internship opportunities are provided in a foreign language, including for foreign students. To provide analysis and evaluation of the connection of the tasks set for students during the internship included in the study programme with the learning outcomes of the study programme (if applicable).**

The study programme includes placement in Latvian pharmaceutical companies A/S "Olainfarm" and A/S "Grindeks" 26 CP from ac. year 2023/2024 – 24 CP. In 2014, RSU concluded broader cooperation agreement with A/S "Olainfarm" and A/S "Grindeks", which also includes provision of placement sites to students. Detailed trilateral placement agreements are concluded with each student, RSU and a pharmaceutical company on the total placement period. Students are provided with the possibility to choose a company for placement. The placement programme defining the organisation of the placement and the tasks to be performed is part of each agreement. Placement is planned in the second and third study semesters, it aims to strengthen theoretical knowledge and practical skills of students in accordance with the requirements of the Industrial Pharmacist's profession standard. Industrial pharmacy placement is divided into five sections, trying to respect

the specific nature of the work of an industrial pharmacist, which provides for specialisation in the manufacture of active substances or finished dosage forms.

Sections of placement:

1 month (4 CP) – manufacture of active pharmaceutical substances;

1 month (4 CP) – manufacture of finished dosage forms;

1 month (4 CP) – work in a quality control laboratory;

1 month (4 CP) – work in an authorisation department and marketing department;

2 months (8 CP) – specialisation in manufacture of active substances or finished dosage forms (as chosen), when a research paper can be prepared.

The student should prepare a placement report describing all the items listed in the placement programme, providing an overview of the activities performed during the day, the materials and processes seen (in accordance with the placement programme). At the end of the report, the student provides an assessment of placement, self-assessment of his or her contribution and proposals. Each section of placement is signed by the placement section supervisor – an employee of the drug manufacturing company.

Tasks of the placement programme are included in the national degree examination, part of which is defending a research paper and analysing and presenting a problem situation in industrial pharmacy. The student receives a random problem situation, it includes the topics corresponding to the placement sections approved in the national placement programme. Problem situations are prepared by placement supervisors – employees of drug manufacturing companies. Both the research work and the analysis and presentation of the problem situation are evaluated by the National Examination Board, which consists of representatives of drug manufacturing companies – placement supervisors and at the same time potential employers. The learning outcomes of study courses provide an opportunity to start placement, performance of placement tasks creates preconditions for successful development of a research paper and passing of the national degree examination, which demonstrates that the learning outcomes of the study programme have been achieved, for example, the ability to apply research and problem-solving skills to the analysis of situations in the pharmaceutical industry.

During placement, the head of the study programme as the placement monitor regularly contacts both representatives of employers who supervise the placement and students to monitor the process and find solutions for individual situations, for example, to eliminate any difficulties that have arisen when a student is trying to combine employment with the planning of placement, as far as possible placement is implemented flexibly over a longer period of time, thus reducing the student's workload.

As mentioned in chapter 3.1.4, the involvement of international students in pharmaceutical companies is an additional burden for those employed there, therefore, placement in English is currently not provided. When the Laboratory of Finished dosage forms with an international team of researchers starts to work, it will be possible to offer placement in the field of industrial pharmacy in the RSU structural unit.

Enclosed:

Annex 9. Description of the organisation of placement of the students: placement programme.

### **3.2.5. Evaluation and description of the promotion opportunities and the promotion process provided to the students of the doctoral study programme (if applicable).**

### **3.2.6. Analysis and assessment of the topics of the final theses of the students, their relevance in the respective field, including the labour market, and the marks of the final theses.**

As it has already been mentioned, a research paper is prepared in a drug manufacturing company as an integral part of placement in the study programme “Industrial Pharmacy”. In this way, it is ensured that a research paper is prepared on topics that are important for manufacturers (i.e. the industry). Research papers were prepared on the following topics important for drug manufacturers:

- “Characterisation of the physical and chemical, structural and mechanical properties of the ingredients of the dosage form – a powder for oral solution”;
- “Validation of the manufacturing process of a finished dosage form”;
- “Development of validation of the “potentiometric titration” method for determining the quantitative content of a finished dosage form”;
- “Validation of the duration of holding of 5 mg of product X and unpackaged tablets in the manufacturing process”;
- “Development of a validation protocol for the manufacturing process of a finished dosage form”;
- “Modern approach to the development of finished dosage forms”;
- “Improving the formulations of veterinary dosage forms and observation of poor flow and adhesion of the final blend at the press”;
- “Primary study of a patent-free finished dosage form”;
- “Development of a generic product (solid dosage form)”;
- “Dependence of pellet sizes on the end point of mass humidification in the pseudo-boiling layer rotation unit”;
- “Effect of changes in the amount of microcrystalline cellulose on the properties of pellets”;
- “Optimisation of pelleting process parameters”.

In 2023, research papers of graduates covered pharmacovigilance, pharmaceutical marketing and instrumental analysis methods.

Topics important for industrial pharmacy are also developed in research papers of graduates of the undergraduate study programme “Pharmacy”, which provides a prerequisite for the interest of students in this field and prepares potential applicants of the study programme “Industrial Pharmacy”.

Research papers are also integrated into the national degree examination as they are defended as part of the national degree examination. Representatives of a drug manufacturer and RSU lecturers participate in the supervision of research papers, the papers are reviewed by RSU lecturers. 3% of the research papers defended so far were assessed with “5” (satisfactory), 12% – “6” (almost good), 3% – “7” (good), 35% – “8” (very good), 18% – “9” (excellent) and 24% – “10” (with distinction). As students had difficulties writing research papers, a new study course “Preparation of Scientific Papers” was introduced into the study programme, which provides methodological

support in writing a research paper.

The defence of research papers shows that the study programme results in the ability of students to find, select, analyse, use and collect scientific literature, process data, summarise information obtained, critically analyse it, provide own assessment and present results.

Enclosed:

Annex 22. Topics of students' final papers.

### 3.3. Resources and Provision of the Study Programme

**3.3.1. Assessment of the compliance of the resources and provision (study provision, scientific support (if applicable), informative provision (including libraries), material and technical provision, and financial provision) with the conditions for the implementation of the study programme and the learning outcomes to be achieved by providing the respective examples.**

In recent years, the RSU Faculty of Pharmacy has been developing very rapidly, external funding has been raised, which is intended for the construction of a new faculty building with the Laboratory of Finished Dosage Forms (LFDF) and purchasing of equipment and technologies for study and scientific needs:

- **ERDF** project No. 1.1.1.4/17/I/011 "[Development of RSU research infrastructure in the field of pharmacy](#)". Total funding – **EUR 4,390,862.00**.
- **ERDF** project No. 8.1.1.0/17/I/006 "[Development of the study environment at Rīga Stradiņš University](#)". Total funding – **EUR 6,243,821.00**.
- **Horizon 2020** project No. 857287 "[Baltic Biomaterials Centre of Excellence \(BBCE\)](#)". Total funding – **EUR 14,999,869.50** (partners: RTU, Latvian Institute of Organic Synthesis and RSU Institute of Stomatology).

Modern premises, a comfortable, safe and evolving environment, as well as the opportunity to learn and work with newer analytical and technological equipment open up opportunities for further scientific growth of both staff and students in the field of science, and to learn the knowledge and skills necessary for the labour market. The new LFDF will provide a technological platform for study courses and will also be a platform for conducting scientific research, a workplace for scientific groups and projects, as well as provide the services needed for the pharmaceutical industry.



Figure 1. Functions of the Laboratory of Finished Dosage Forms (LFDF)

Thus, there will be greater opportunities for research work, placement of students of the study programme “Industrial Pharmacy”, incoming student mobility and even closer synergies between industrial pharmacy studies and the pharmaceutical industry. The laboratory already employs one graduate of the study programme “Industrial Pharmacy” and will serve as a potential workplace for several more graduates of the programme.

The new building and the laboratories started functioning at the beginning of 2023, new analytical (HPLC – FD/PDA/RI, HPLC – MS/MS, GC/HS – FID, GC – FID, ICP – MS/MS, *Calorimeter*, *Rheometer*, *Polarimeter*, FTIR, TLC/HPTLC) and technological (*High-shear mixer*, *Fluid bed dryer/processor*, *Roller compactor*, *Bench top tablet press-simulator*, *Rotary tablet press*, *Automatic capsule filling machine*, *Tablet coater*, *Semi-automatic blister packing machine*) equipment has already been purchased, which will ensure a full solid dosage form manufacturing process and research.

The RSU Library fully provides students and academic staff with access to scientific databases and study literature.

In the supply of e-resources, five e-book databases and seven full-text databases of journals are available in the pharmaceutics sector. Since 2021, a special database of e-books in the pharmaceutical sector *AccessPharmacy* is subscribed.

E-books in pharmacy are available in subscribed databases *AccessPharmacy*, *ebook Academic Collection (EBSCO)*, *Ebook Central (Proquest)*, *AccessMedicine* and *ClinicalKey*. For example, the *Ebook Central (Proquest)* contains 1035 e-books in section “Pharmacy”, but *ebook Academic Collection (EBSCO)* contains 425 e-books. Subscribed multidisciplinary databases *Ebook Central (ProQuest)* and *EBSCO eBook Academic Collection* offer e-books in different fields and from different publishers that provide selected information results searching by various topics / keywords. The *AccessPharmacy* database is an interactive, educational platform in pharmacology and pharmacy by *McGraw-Hill*, which contains internationally recognised textbooks, video materials, images, information on medicines and other electronic resources.

The full texts of scientific articles in pharmacy are available in subscribed databases: *SAGE Premier 2022*, *Health Research Premium Collection (Proquest)*, *MEDLINE Complete (EBSCO)*, *BMJ Journals*, *Wiley Online Journals*, *Science Direct*, *Academic Search Complete (EBSCO)*. The single search *Primo* shows 593 journal names in “Pharmacy and Pharmacology”. Two databases – *DynaMed* and *ClinicalKey* – contain information on medicinal products.

Section “[List of recommended reading e-books](#)” on the website of the library lists the e-books referred to in study programmes – both purchased and from subscribed databases (such sections as “Pharmacology and Toxicology”, “Pharmacy, Pharmaceutical Chemistry”, “Medical Chemistry”, etc. are available).

RTU also provides students with scientific databases (for example, *Scopus*, *Web of Knowledge*, *ScienceDirect*, *Wiley*), which provide access to the leading industry journals. At RTU, the implementation of the study programme “Industrial Pharmacy” is ensured by the Institute of Technology of Organic Chemistry and the Department of Chemical Technology of Biologically Active Compounds. Until now, RTU was not involved in writing research papers of students. However, if needed, it has all the necessary infrastructure and modern scientific equipment (for example, *Brucker 500* and *300 MHz* nuclear magnetic resonance units, *Agilent* and *Waters* liquid and gas chromatography systems with different detectors) to work on research papers on pharmacy related topics (in particular, synthesis of active substances).

Currently, RSU, with the support of co-financing from the European Regional Development Fund (ERDF), is developing pharmaceutical research infrastructure – the LFDF, which will ensure research and training of students in the field of industrial pharmacy. Two functional units of equipment will be created in the laboratory:

- solid dosage form development unit with equipment for preparing and packaging powders, granules, tablets and capsules;
- standardisation unit with equipment for research of raw materials, intermediates, final products and materials, as well as for quality control by chromatographic, spectrometric and other analytical methods.

Enclosed:

Annex 23.1. Assessment of the informative and methodological provision regarding Library resources for the implementation of the study direction “Health Care” in accordance with the requirements of the guidelines

### **3.3.2. Assessment of the study provision and scientific base support, including the resources provided within the framework of cooperation with other science institutes and higher education institutions (applicable to doctoral study programmes) (if applicable).**

### **3.3.3. Indicate data on the available funding for the corresponding study programme, its funding sources and their use for the development of the study programme. Provide information on the costs per one student within this study programme, indicating the items included in the cost calculation and the percentage distribution of funding between the specified items. The minimum number of students in the study programme in order to ensure the profitability of the study programme (indicating separately the information on**

**each language, type and form of the study programme implementation).**

The study programme in the Latvian flow is planned to be financed from state budget funds and the funds of individuals and legal entities setting the tuition fee in accordance with the state budget funding without social security of EUR 7335 per year of studies. The tuition fee can be subject to discounts in accordance with internal norms and regulations. In the Latvian flow, the number of students planned to be achieved in the study programmes in 1.5 years of studies is 17 students, enrolling 9 students in the first year, planning a drop-out of 1 student in the second year. Such a number of students is optimal to ensure a high-quality study process and to make the study programme cover its implementation, as well as development costs. Meanwhile, in the English flow, which lasts 1.5 years, the study programme will be able to cover implementation and development costs, if a group consists of 9 students (with a minimum drop-out), who pay a tuition fee of EUR 10750 per year.

The funding is used for staff remuneration, attraction of visiting university lecturers, taxes, maintenance of IT infrastructure, purchase of equipment and devices and study visit costs. In addition to the direct costs of the implementation of lectures and classes, the StP must cover the infrastructure maintenance costs (facilities, IT solutions) and other RSU common resources used in StP (Student Service, Library, organisation of the study process, grant for the Student Union and other support and administrative functions).

StP is implemented by RSU Faculty of Pharmacy Department of Applied Pharmacy, Department of Dosage Form Technology and Department of Pharmaceutical Chemistry and Faculty of Medicine Department of Clinical Skills and Medical. Remuneration of the academic staff in the first year of the Latvian flow StP is planned to be approximately 20 thousand EUR and approximately 24 thousand EUR in the English flow study programme.

Table 2. **Information on student costs**

**Costs of the study programme in the Latvian flow**

<b>Name</b>	<b>Result with the existing tuition fee</b>
Average income per student, EUR	5642
Average cost per student, EUR	5287
Academic staff, %	32
Department resources, %	15
Scholarship costs, %	5
Fixed costs, %	4
Overheads, %	44

**Costs of the study programme in the English flow**



Name	Result with the existing tuition fee
Average income per student, EUR	7504
Average cost per student, EUR	6226
Academic staff, %	34
Department resources, %	13
Fixed costs, %	3
Overheads, %	50

### 3.4. Teaching Staff

**3.4.1. Assessment of the compliance of the qualification of the teaching staff members (academic staff members, visiting professors, visiting associate professors, visiting docents, visiting lecturers, and visiting assistants) involved in the implementation of the study programme with the conditions for the implementation of the study programme and the provisions set out in the respective regulatory enactments. Provide information on how the qualification of the teaching staff members contributes to the achievement of the learning outcomes.**

Academic staff at the RSU Faculty of Pharmacy is actively involved in various research projects. Projects can be implemented using the equipment available at departments. The students who are involved in the BBCE project, can use resource sharing opportunities with RTU and Latvian Institute of Organic Synthesis.

Involvement in projects promotes scientific competences, growth of academic staff and the fulfilment of criteria, as well as ensures the involvement of students in research projects in order to promote the development of student research projects, as well as increase the understanding of students regarding scientific activities.

Currently, faculty staff and students are involved in several projects, which take place in cooperation with other Latvian universities – RTU, Latvia University of Life Sciences and Technologies, as well as scientific institutes (Latvian Institute of Organic Synthesis, Latvian Biomedical Research and Study Centre) (the information is available on project websites (for example, in [Latvian](#) and [English](#)), see more in the following paragraphs).

The research directions and results of the academic staff involved in the study programme focus on successful implementation of the study programme “Industrial Pharmacy” and cooperation with the pharmaceutical industry.

Almost all RSU lecturers involved in the study programme have a doctoral degree, four

(**M. Dambrova**, **E. Vāvers**, **D. Šmits**, **B. Mauriņa**) have been awarded the status of an expert in the Latvian Council of Science; in order to qualify for it, it is necessary to have three anonymously reviewed scientific publications published in a scientific journal indexed in the *Scopus* or *Web of Science* database, including a scientific publication that is available in open access; or two such publications and a scientific monograph.

Lecturers actively participate in international and national research projects.

Lecturers constantly participate in research work, read reports at scientific conferences, including international ones.

Professor **M. Dambrova**, who received several significant national and scientific awards, is a co-author of the scientific monograph "Scientific writing and dissemination of research results".

Professor **M. Dambrova** is also the lecturer with the highest number of publications at RSU – 155 *Scopus* publications, Hirsch index – 28.

All lecturers prepare peer-reviewed international publications and review scientific articles. Several lecturers work on the editorial boards of scientific journals, participate in funded research projects, are experts in various projects, as well as members of Latvian and international professional organisations. Projects carried out by the academic staff contribute to the development of scientific capacity and competitiveness, which could be also characterised by the increase in the number of scientific articles in *Scopus* or *Web of Science* journals, which strengthens the authority and recognisability of RSU as a centre of study and science. For more information, please see CVs of lecturers: <https://science.rsu.lv>.

Faculty staff and students are currently involved in several projects, part of which are related to the development of dosage forms and drug delivery systems:

- **Horizon 2020**. 2020–2026, project No. 857287 "[Baltic Biomaterials Centre of Excellence \(BBCE\)](#)" second phase (led by professor **Bandere**). RSU LFDF is involved in the BBCE project to supplement knowledge of the project consortium and integrate competence in the field of pharmaceutical technology. LFDF is gradually extending its research direction from oral solid dosage forms to biomaterials as drug delivery systems. The project has been created in cooperation with RTU, the Latvian Institute of Organic Synthesis, the RSU Institute of Stomatology, as well as AO Research Institute Davos (Switzerland) and Friedrich Alexander University Erlangen-Nürnberg (Germany) in accordance with the Latvian Smart Specialization Strategy in biomedicine, medical technology, biopharmacy and biotechnology. The project widely offers training opportunities for faculty staff, doctoral students and students.

Professor **D. Bandere**, Assistant Professor **A. Brangule**, Associate Professor **B. Mauriņa**, Associate Professor **I. Skadiņš**.

- **European Agricultural Fund:**

- 2019–2023, project No. 18-00-A01620-000042 "[Development of bioeffective fodder for biological farms](#)" (Latvian only). Associate Professor **Bārene**, Assistant Professor **I. Daberte**.
- 2019–2023, project No. 18-00-A01620-000028 "[Development of an anti-parasitic herbal product containing extracts of medicinal plants](#)" (Latvian only). Professor **Bandere**, Associate Professor **R. Koka**.
- 2022–2026, project No. 22-00-A01612-000007 "Development of tansy, Latvian traditional herbal product, leaf extract dosage forms and its effect on the microbiome and anti-parasitic control of the digestive tract of sheep". Professor **Bandere**, Assistant Professors **A. Brangule**, **O. Brante**, **R. Šukele**, **A. Bārzdiņa**.

- **RSU grants:**

- 2022–2023, project No. 6- ZD22/11 /2022 “Optimisation of drug delivery systems when modelling dissolution processes”. Assistant Professor **Brangule**.
- 2022–2023, project No. 6- ZD22/9 /2022 “Chemical “fingerprints” of herbal products: problem solution tool”. Associate Professor **Mauriņa**.

Practical work experience of several invited lecturers in the areas, which include competences of an industrial pharmacist, for example, job duties of **B. Galviņa, M. Stare** in manufacturing of finished dosage forms at A/S “Grindex”, experience of **O. Brants** in the laboratory of finished dosage forms at A/S “Olainfarm”, experience of **I. Smiltena** in organisation and supervision of clinical trials, experience of **A. Lece** and **I. Bārene** in authorisation of medicinal products and the State Agency of Medicines, is considered very important and makes a priceless contribution to mastering of practical knowledge by future industrial pharmacists.

From 1 January 2017 to 1 October 2022, six lecturers of the study programme “Industrial Pharmacy” participated in continuing education activities of the RSU Centre for Educational Growth (CEG) attending more than 50 training activities of different content. The lecturers of the study programme “Industrial Pharmacy” spent 937 academic hours on continuing education activities.

The lecturers participated in the following CEG activities, for example:

- Remote work of student groups with the *Miro* tool;
- *Collaboration and Partnership Towards Professional and Sectoral Development: Local, National, Transnational*;
- *Creating Engaging and Interactive Classrooms through Active Learning Techniques*;
- *Contextualizing the use of Webinar in Higher Education*;
- The *PubMed* database and its tools for searching for scientific publications;
- Possibilities and comparison of *Web of Science* and *Scopus* databases;
- Digital Darwinism – what it means for us each and our institution;
- Creation of electronic tests;
- Interactive presentations and real-time feedback in the *Mentimeter* tool;
- Improvisation in pedagogical activities;
- Drafting of interactive study materials (*H5P*);
- Art of elocution;
- Visualization of content in presentations;
- Using the revision and content originality software *Turnitin*.

Visiting lecturers are selected carefully to update the content of the study programme and harmonise it with industrial pharmacy programmes of other countries, make it international. Since the beginning of implementation of the study programme, there has been cooperation with Professor **A. Juppo** from the University of Helsinki, who is a renowned expert in industrial pharmacy, author of more than 20 publications in peer-reviewed international journals in the last five years – *International Journal of Pharmaceutics, Journal of Medical Science, European Journal of Pharmaceutics and Biopharmaceutics, Veterinary and Animal Science*; participant of research projects (ORBIS –Open Research Biopharmaceutical Internships Support (MSCA-RISE-2017 No 778051); *Geriatric dosage forms research; Paediatric formulation research; Probing solid state transformations during pharmaceutical processing*); leading researcher of the pharmacy development group. A. Juppo is a Professor at the Division of Pharmaceutical Chemistry and Technology of the University of Helsinki, head of the doctoral study programme “Drug Research”, supervisor of Master’s theses and doctoral theses, as well as the head of the study programme “Industrial Pharmacy” at the University of Helsinki. The professor reads lectures and classes in study courses “Finished Dosage Forms” and Placement in Industrial Pharmacy” on the topic “Leadership in the Pharmaceutical Industry” on a regular basis.

Professor **Vitalis Briedis** from the Lithuanian University of Health Sciences is a renowned specialist in industrial pharmacy – he published in peer-reviewed international journals – *International Journal of Clinical Pharmacy*, *Medicina*, *Molecules*, *European Journal of Allergy and Clinical Immunology*; is the group leader in the research project “*Drug delivering 3D printed scaffold strategy brings human body implants to the next level of personalization (DD-SCAFF)*”. In the Lithuanian University of Health Sciences, Professor V. Briedis reads courses “Dosage Form Technology”, “Biological Drugs and Pharmaceutical Biotechnology”, “Clinical Trials”. In the last five years, a doctoral thesis supervised V. Briedis has been defended every year. He is also an expert of the European Medicines Agency (EMA); a member of the EMA working group “*Committee for Medicinal Products for Human Use*” Biologicals; an external expert of the Innovative Medicines Initiative and the Innovative Drugs Initiative (IMI-JU); 1. Member of the International Scientific Organisation Committee of the European Conference on Pharmaceutics and their Delivery Systems.

Three teaching staff members are involved in the implementation of the study programme from RTU: Māra Jure, Aigars Jirgensons and Kristīne Čapase-Jastržemska.

Professor *Dr. chem.* **Māra Jure** is an author of more than 170 scientific publications and 4 patents, responsible editor of 2 monographs, international expert of ECTS/DS and Member of Latvian Bologna process promoters’ Group, Director of RSU and RTU joint professional study programme “Industrial Pharmacy” at RTU (2015-2021), supervisor of final papers of 4 PhD students, 4 engineers, 13 Masters and 37 Bachelors. Expert of the Latvian Council of Sciences in the fields of chemistry, chemical engineering and pharmacy, member of the Council of Experts of the Chemical Industry and its Allied Sectors (Chemistry, Pharmacy, Biotechnology, Environment). Participant and leader of several Latvian and international projects. Paula Valdena is a member of the Organic Chemistry Symposium Organising Committee and a member of the editorial board of collected articles “*Cheminē tehnoloģija*” (ISSN 1392-1231) of the Kaunas University of Technology. Member of the RTU Senate (from 2003) and Chairperson of the Senate (2006-2012), head of the RTU Senate Legislation Committee and member of the RTU Rector’s Council (2006-2012), member of the Council of the Faculty of Materials Science and Applied Chemistry (from 1993), member of the Doctoral Council “RTU P-01”, correspondent member of the Latvian Academy of Sciences (LAS) (from 2005), member of the Expert Commission of the Department of Chemical, Biological and Medical Sciences of LAS (from 2017), representative of Latvia in the Working Party on History of Chemistry of the European Chemical Society. Vice dean for academic affairs of the Faculty of Materials Science and Applied Chemistry of RTU (1993-2019), head of the Department of Chemical Technology of Biologically Active Compounds (from 2000).

Professor *Dr. chem.* **Aigars Jirgensons** is an author of more than 75 publications indexed in the *Scopus* database, Hirsch index – 16. His scientific interests include looking for new therapeutic substances and developing new synthetically valuable methods. A. Jirgensons is the leader of different scientific projects, for example, *European Regional Development Foundation Project: Inhibitors of Malaria Blood Stage Proteases*; *Horizon 2020, Marie Curie Actions ETN-2017, Project: CARTNET (Combating Antimicrobial Resistance Training Network)*; *Horizon 2020, Research innovative staff exchange, Project: PELICO (Peptidomimetics with Photocontrolled Biological Activity)*; *ERANET LAC, Project: TALASA (Targeting Lipoic Acid as Redox and Cofactor Modulator in MRSA)*; *Fluorinated Small Rings for Drug Discovery*; *Development of Novel Fluoromethylene Transfer Reagents*; *Derivatization of Amino Acids via C(sp<sup>3</sup>)-H Bond Activation*; *LIOS Student Grant: Electrochemical Generation of Carbenium Ions and their Reaction with Nucleophiles*. Moreover, A. Jirgensons conducts contract research for the largest European pharmaceutical companies, is the director for scientific work of the Latvian Institute of Organic Synthesis, the head of the Methodological Group on Organic Synthesis, a correspondent member of the Latvian Academy of Sciences and an expert of the Latvian Academy of Sciences in chemistry.

Lecturer **Kristīne Čapase-Jastržembska** is a patent specialist at the Latvian Institute of Organic Synthesis. This work provides her with the necessary practical experience and knowledge in the field of patent protection. Moreover, K. Čapase-Jastržembska works directly with patents protecting organic chemistry, medical chemistry and biochemistry inventions – that is with intellectual property related to pharmacy. She was involved also in the BBCE intellectual property law policy making.

Enclosed:

Annex 24.7. Analysis of the Composition of Teaching Staff.

### **3.4.2. Analysis and assessment of the changes to the composition of the teaching staff over the reporting period and their impact on the study quality.**

The RSU Human Resources Department supervises that, when a new study programme is developed, academic and scientific staff for its provision is attracted in compliance with provisions of the Law on Higher Education Institutions, including provisions of Section 55(1)(3), (28) and (30), etc, and the Law on Scientific Activity. When selecting personnel and collecting documents in the process of preparing for academic elections, the RSU Human Resources Department makes sure that personnel knows the official language.

The RSU regularly organises seminars and other forms of professional improvement and experience exchange activities in order to strengthen and develop the skills and competences of academic staff, for example, seminars on pedagogy and research methodology problems are offered annually. To improve their competences and skills lecturers can benefit from seminars offered by the School of Junior Academics and the RSU Centre for Educational Growth. The Doctoral School offers focused research competence development seminars and networking events intended both for doctoral students and lecturers.

1-2 doctors of pharmacy defend doctoral theses every year and get involved in academic work during their doctoral studies. When the study course “Preparation of Scientific Papers” was included in the study programme, Edijs Vāvers, Doctor of Pharmacy of the latest generation, started academic work.

In the study programme, the changes in the teaching staff are insignificant, the involved academic staff has proven to be a strong team. The changes have taken place for objective reasons (change of workplace, retirement) and this has not affected the quality of studies. New invited lecturers started working M. Stare (A/S “Grindeks”), O. Brante (previously A/S “Olainfarm”, now – RSU LFDF).

The composition of most of the study courses provided by RTU has remained unchanged since the creation of the study programme “Industrial Pharmacy”. Previously, the study course “Patent Science” was taught by Māra Rozenblate, the leading expert of the Patent Office of the Republic of Latvia. This study course is currently taught by lecturer K. Čapase-Jastržembska, who has practical experience as a patent specialist at the Latvian Institute of Organic Synthesis, where the patented areas are directly related to the matter of patenting organic chemistry, including medical chemistry, and new biologically active substances. Thus, a professional in the field has been involved in the implementation of this study course, who has in-depth competence in the field of intellectual property protection specifically in the matters related to pharmacy.

**3.4.3. Information on the number of the scientific publications of the academic staff members, involved in the implementation of doctoral study programme, as published during the reporting period by listing the most significant publications published in Scopus or WoS CC indexed journals. As for the social sciences, humanitarian sciences, and the science of art, the scientific publications published in ERIH+ indexed journals or peer-reviewed monographs may be additionally specified. Information on the teaching staff included in the database of experts of the Latvian Council of Science in the relevant field of science (total number, name of the lecturer, field of science in which the teaching staff has the status of an expert and expiration date of the Latvian Council of Science expert) (if applicable).**

**3.4.4. Information on the participation of the academic staff, involved in the implementation of the doctoral study programme, in scientific projects as project managers or prime contractors/ subproject managers/ leading researchers by specifying the name of the relevant project, as well as the source and the amount of the funding. Provide information on the reporting period (if applicable).**

**3.4.5. Assessment of the cooperation between the teaching staff members by specifying the mechanisms used to promote the cooperation and ensure the interrelation between the study programme and study courses/ modules. Specify also the proportion of the number of the students and the teaching staff within the study programme (at the moment of the submission of the Self-Assessment Report).**

The study programme “Industrial Pharmacy” is relatively short – only 3 semesters, and the number of study courses included therein is not high. The cooperation is manifested, for example, in the mutual visiting of lectures and classes of the lecturers (observation of teaching), which allows to evaluate the strengths and weaknesses of the work; preparation of lecturers’ annual reports on academic, scientific and creative activities, publications, participation in scientific research and scientific conferences; promotion of international exchange of lecturers, creating an opportunity for lecturers to gain experience in foreign universities; inviting highly qualified lecturers and teachers of foreign higher education institutions to become visiting lecturers.

Several lecturers are involved in the implementation of several study courses, which facilitates the diversification of study content, while maintaining equal requirements for students. The attitude of the teaching staff towards the duties to be performed clearly confirms the possibilities of sustainable development of the StP. The teaching staff is regularly invited to discuss issues related to the study process and improvement thereof. For example, the meetings to discuss on the progress of the research papers referred include both the lecturers involved in the programme, representatives of the new LFDF and representatives of manufacturers, and this promotes the mutual exchange of thoughts among lecturers and integration of the programme into LFDF and development opportunities.

Mutual feedback seminars on current topics are organised for cooperation of lecturers. Several lecturers cooperate with each other, jointly implementing study courses, working on research projects, and supervising students' papers.

The work of the teaching staff is a team work in which everyone sees their place and task. The qualification and motivation of the teaching staff to work in the provision of the study process and research is high. Relationships with students are humane, forthcoming, while maintaining strict requirements for each study task.

Students have the possibility to get help, tutorials and support in the course of the study process. Also, in something is unclear, students can contact the head of StP or the dean and receive consultations on more successful implementation of the study process both individually and collectively. Students are also involved in the improvement and control of the quality of the StP.

The ratio of the number of students and teaching staff in the study programme: 9 students and 14 lecturers. The ratio of the number of students and teaching staff is 0.6.

# Annexes

III - Description of the Study Programme - 3.1. Indicators Describing the Study Programme		
Sample of the diploma and its supplement to be issued for completing the study programme	24.1-Rupnieciska-f-eng.pdf	24.1_Rupnieciskais_f_lv.pdf
For academic study programmes - Opinion of the Council of Higher Education in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions (if applicable)		
Compliance of the joint study programme with the provisions of the Law on Higher Education Institutions (table) (if applicable)	15_Anex_Joint_StP.pdf	15_pielik_kopigas_programmas_atbilstiba_LV.pdf
Statistics on the students in the reporting period	16_Anex_Stud_statistics_Industr_Pharmacy.pdf	16_pielik_2.Rupnieciskā farmācija_statistika_lv.pdf
III - Description of the Study Programme - 3.2. The Content of Studies and Implementation Thereof		
Compliance with the study programme with the State Education Standard	17.1_Anex_National_educ_standard_Industrial_Pharmacy.pdf	17.1_pielik_MK305_atbilstiba_RupnFarm.pdf
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard or the requirements for professional qualification (if applicable)	18.2_Annex_compliance_with_prof_standard_mapping_Ind_Pharmacy.pdf	18.2_pielik_Prof_standarta_kartejums_Rupnieciska_Farmacija.pdf
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)		
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	18.1_Annex_learning_outcomes_mapping_Ind_Pharmacy.pdf	18.1_St_kursu_StP_rezult_kartejums_Rupn_farmacija.pdf
The curriculum of the study programme (for each type and form of the implementation of the study programme)	19_Anex_Plan for full-time studies_Industrial Pharmacy.pdf	19_pielik_StP_planojums_Rupnieciska_farmacija_lv.pdf
Descriptions of the study courses/ modules	20_Anex_Study_course_description_Industrial_Pharmacy.pdf	20_pielik_Kursu_apr_Rupnieciska_farmacija.pdf
Description of the organisation of the internship of the students (if applicable)	09_Anex_Student_placement_Industr_Pharmacy.pdf	9_pielik_Prakses_org_RupnFarm_lv.pdf
III - Description of the Study Programme - 3.4. Teaching Staff		
Confirmation that the academic staff of the doctoral study programme includes not less than five doctors, of which at least three are experts approved by the Latvian Council of Science in the branch or sub-branch of science in which the study programme intends to award a scientific degree (if applicable)		
Confirmation that the academic staff of the academic study programme complies with the requirements specified in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions (if applicable)		



# Physician's Assistant (41721)

Study field	<i>Health Care</i>
ProcedureStudyProgram.Name	<i>Physician's Assistant</i>
Education classification code	<i>41721</i>
Type of the study programme	<i>First level professional higher education study programme</i>
Name of the study programme director	<i>Solvita</i>
Surname of the study programme director	<i>Smilgzieda</i>
E-mail of the study programme director	<i>Solvita.Smilgzieda@rsu.lv</i>
Title of the study programme director	<i>Bc.sc.sal.</i>
Phone of the study programme director	
Goal of the study programme	<i>To implement mastering of students' knowledge, skills and competences ensuring the preparation of medical practitioners for further comprehensive work in the field of health care, creating a free, responsible and creative personality, developing critical thinking</i>
Tasks of the study programme	<p><i>1. To ensure the preparation of medical practitioners, including professional theoretical and practical knowledge and skills.</i></p> <p><i>2. To develop students' ability to obtain information actively, evaluate and use critical theoretical and practical knowledge in the prehospital and hospital period.</i></p> <p><i>3. To facilitate professional development and intellectual potential through development of research in the Physician's Assistant programme.</i></p>

Results of the study programme	<p><i>Knowledge</i></p> <p>1. Able to demonstrate professional education knowledge and skills in the speciality in accordance with the requirements set in the profession standard.</p> <p><i>Skills</i></p> <p>2. Able to provide emergency medical assistance in critical situations to patients of all ages and genders and to provide emergency medical assistance in case of injuries and extreme situations in cooperation with the State Fire and Rescue Service, the police, the Centre of Emergency and Disaster Medicine.</p> <p>3. Able to prescribe appropriate, including potent, medicinal products based on the patient's diagnosis and general state of health, ensure adequate administration of medicinal products observing the principles of aseptics and antiseptics, identify indications, contraindications and potential side effects of the medicinal product and inform the patient of their pharmacological effects and conditions of use.</p> <p>4. Uses the acquired knowledge regarding work organisation and documents regulating it, organises and manages their own work and work of their colleagues.</p> <p>5. Educates the public, team members and patients.</p> <p>6. Pursues professional development and the improvement of specific knowledge and skills.</p> <p><i>Competences</i></p> <p>7. Able to objectively assess the patient's overall condition by reasonably justifying it, taking into account objective data, to provide adequate medical assistance to patients of different ages, genders and cultures, to apply the medical procedures specified in the profession standard according to the specific case and situation.</p> <p>8. Conducts a comprehensive examination, evaluation and case diagnosis of patients of all ages and genders by collecting a patient's history, including current complaints, diseases and linking social and family history.</p> <p>9. Properly prepares the documentation listed in regulatory enactments.</p>
Final examination upon the completion of the study programme	National degree examination, defence of the qualification paper

**Full time studies - 3 years - latvian**

Study type and form	<i>Full time studies</i>
Duration in full years	<i>3</i>
Duration in month	<i>0</i>
Language	<i>latvian</i>
Amount (CP)	<i>120</i>
Admission requirements (in English)	<i>Secondary education</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	<i>-</i>
Qualification to be obtained (in english)	<i>Physician's Assistant (paramedic)</i>

**Places of implementation**

<b>Place name</b>	<b>City</b>	<b>Address</b>
Liepāja branch of Rīga Stradiņš University	LIEPĀJA	RIŅĶU IELA 24/26, LIEPĀJA, LV-3405

## 3.1. Indicators Describing the Study Programme

**3.1.1. Description and analysis of changes in the parameters of the study programme made since the issuance of the previous accreditation form of the study field or issuance of the study programme license, if the study programme is not included on the accreditation form of the study field, including changes planned within the evaluation procedure of the study field evaluation procedure.**

*Table 1. Changes in parameters of the study programme (StP)*

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period (until 2022)	Planned changes within the assessment procedure (after the accreditation)
1.	Study direction	—	—
2.	Title of StP	—	—
3.	Code according to the Latvian Education Classification	—	—
4.	Head of SP	Since academic year 2021/2022 StP director Solvita Smilgzieda	—
5.	Scientific degree of the Head of StP	—	—
6.	Aim of StP	The aim of StP has been updated. To implement mastering of students' knowledge, skills and competences ensuring the preparation of medical practitioners for further comprehensive work in the field of health care, creating a free, responsible and creative personality, developing critical thinking	—

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period (until 2022)	Planned changes within the assessment procedure (after the accreditation)
7.	Tasks of StP	<p>The tasks of StP have been updated.</p> <ol style="list-style-type: none"> <li>1. To ensure the preparation of medical practitioners, including professional theoretical and practical knowledge and skills.</li> <li>2. To develop students' ability to obtain information actively, evaluate and use critical theoretical and practical knowledge in the prehospital and hospital period.</li> <li>3. To facilitate professional development and intellectual potential through development of research in the Physician's Assistant programme</li> </ol>	—

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period (until 2022)	Planned changes within the assessment procedure (after the accreditation)
8.	Learning outcomes to be achieved	<p>The StP learning outcomes have been updated (9 instead of 12) based on indications of the Quality Agency for Higher Education.</p> <ul style="list-style-type: none"> <li>· Able to demonstrate professional education knowledge and skills in the speciality in accordance with the requirements set in the profession standard.</li> <li>· Able to objectively assess the patient's overall condition by reasonably justifying it, taking into account objective data, to provide adequate medical assistance to patients of different ages, genders and cultures, to apply the medical procedures specified in the profession standard according to the specific case and situation.</li> <li>· Able to provide emergency medical assistance in critical situations to patients of all ages and genders and to provide emergency medical assistance in case of injuries and extreme situations in cooperation with the State Fire and Rescue Service, the police, the Centre of Emergency and Disaster Medicine.</li> <li>· Conducts a comprehensive examination, evaluation and case diagnosis of patients of all ages and genders by collecting a patient's history, including current complaints, diseases and linking social and family history.</li> <li>· Able to prescribe appropriate, including potent, medicinal products based on the patient's diagnosis and general state of health, ensure adequate administration of medicinal products observing the principles of aseptics and antiseptics, identify indications, contraindications and potential side effects of the medicinal product and inform the patient of their pharmacological effects and conditions of use.</li> <li>· Properly prepares the documentation listed in regulatory enactments.</li> <li>· Uses the acquired knowledge regarding work organisation and documents regulating it, organises and manages their own work and work of their colleagues.</li> <li>· Educates the public, team members and patients.</li> <li>· Pursues professional development and the improvement of specific knowledge and skills.</li> </ul>	—

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period (until 2022)	Planned changes within the assessment procedure (after the accreditation)
9.	Final examination upon the completion of StP	—	—
10.	Type and form of studies	—	—
11.	Duration of implementation	—	—
12.	Language of implementation	—	—
13.	Workload of StP (CP)	—	In accordance with amendments to Section 1(8) of the Law on Higher Education Institutions, which entered into force on 11 October 2022, the transition to the European Credit Transfer and Accumulation System will be implemented until 31 December 2024
14.	Admission requirements	—	—
15.	Degree to be awarded	—	—
16.	Qualification to be awarded	—	Physician's Assistant (Paramedic)
17.	Place of implementation	—	—

Table clearly shows that the following changes have been made in StP parameters – the aim and tasks of the study programme have been updated. Guided by the recommendations of the Quality Agency for Higher Education, the volume of learning outcomes was reduced from 12 to 9 combining them and clarifying their content.

**3.1.1.2. Analysis and assessment of the study programme compliance with the study field. Analysis of the interrelation between the code of the study programme, the degree, professional qualification/professional qualification requirements or the degree and professional qualification to be acquired, the aims, objectives, learning outcomes, and the admission requirements. Description of the duration and scope of the implementation of the study programme (including different options of the study programme**

## implementation) and evaluation of its usefulness.

Graduates of the medical study programme “Physician’s Assistant” implemented at the Liepāja Branch of Rīga Stradiņš University obtain first level professional education and physician’s assistant’s qualification. First level professional higher education (fourth level professional qualification) shall be implemented after general or vocational secondary education. The duration of full-time intramural studies is three years (120 CP / 180 ECTS), which is an optimal time period for learning the content of this study programme (StP). The programme is implemented in the Latvian language.

**Physician’s Assistant** (paramedic) is a medical practitioner who provides emergency medical assistance to the sick (injured), assesses the health condition of the patient, determines diagnosis and treatment, independently uses and prescribes medicinal products, including potent products, in cooperation with the doctor provides continuous medical assistance and prevention for patients at all levels of healthcare, organises and manages teamwork, educates patients, members of society, team members, states the death of a patient, is responsible for the results of his or her professional activities in accordance with his or her competence.

StP “Physician’s Assistant” (paramedic) belongs to the thematic field of education “Health and Social Welfare”, the thematic field of education “Health Care”, group of education programmes “Medical Treatment”, therefore the code number of the study programme is 41721. Based on the aforementioned information, it can be concluded that the study programme “Physician’s Assistant” corresponds to the study direction “Health Care” that is being accredited.

The study programme corresponds to the Classification of Education and Training Sectors defined in Annex 2 to Regulations of the Cabinet of Ministers No. 322 “Regulations on the Classification of the Latvian Education” issued in accordance with Section 21(1) of the [Statistics Law](#), Section 14(1.1) of the [Education Law](#) and Section 3(6) of the [Law on Higher Education Institutions](#) (as amended by CM Regulations No. 616 of [02.10.2018](#)).

The **aim** of first level professional higher education study programme “Physician’s Assistant” is to implement mastering of students’ knowledge, skills and competences ensuring the preparation of medical practitioners for further comprehensive work in the field of health care, creating a free, responsible and creative personality, developing critical thinking.

In accordance with the aim and tasks of StP in the study process the student masters the knowledge, skills and competences required for the profession, which are defined in the Physician’s Assistant’s [profession standard](#) (available in Latvian only) and corresponds to Level 5 of the Latvian Qualifications Framework (LQF). The study programme enables students to reach the requirements included in the profession standard:

- to obtain professional education knowledge and skills in the speciality in accordance with the requirements set in the profession standard;
- to objectively assess the patient’s overall condition by reasonably justifying it, taking into account objective data, providing adequate medical assistance to patients of different ages, genders and cultures; to provide emergency medical assistance in critical situations to patients of all ages and genders and to provide emergency medical assistance in case of injuries and extreme situations in cooperation with the Fire and Rescue Service, the police, the Centre of Emergency and Disaster Medicine;
- to conduct a comprehensive examination, evaluation and case diagnosis of patients of all ages and genders by collecting a patient’s history, which includes current complaints,



- diseases and linking social and family history;
- to prescribe appropriate, including potent, medicinal products based on the patient's diagnosis and general state of health, informing the patient of their pharmacological effects and conditions of use;
- to ensure adequate enteral, parenteral administration of medicinal products observing the principles of aseptics and antiseptics, identifying indications, contraindications and potential side effects of the medicinal product;
- to apply the medical procedures specified in the profession standard according to the specific case and situation;
- to properly prepare the documentation listed in regulatory enactments.

Students are enrolled to the study programme in accordance with Regulations of the Cabinet of Ministers No. 846 "[Regulations Regarding Requirements, Criteria and Procedure for Admission to Study Programmes](#)" and the Admission Regulations approved by the Senate of Rīga Stradiņš University. The Admission Regulations apply to the specific academic year and are available in the RSU electronic environment. Applicants of the study programme "Physician's Assistant" are enrolled according to the competition results, which are made up of the CE assessments in mathematics, Latvian language, foreign language – in accordance with the requirements of the profession standard and the knowledge necessary for the commencement of the study programme as provided by the preliminary know' necessary for mastering courses in the first year of studies. For example, in study courses "[Medical Terminology](#)" (in [English](#), [German](#)), "Professionally Technical Skills", "Civil and Environmental Protection, First Aid", "Pharmacology", "Latin Terminology", etc.

Enclosed:

Annex 24.1. Model diploma and supplement thereto.

Annex 24.8. Sample study contract.

### **3.1.3. Economic and/ or social substantiation of the study programme, analysis of graduates' employment.**

The profession of a physician's assistant dates back to the beginning of the century in Europe. The profession developed rapidly during World War II, when there was shortage of doctors and qualified providers of medical assistance. From the very beginning of the profession, its initiators realised that it was possible, in a relatively short period of time, to prepare sufficiently competent professionals capable of acting independently and replacing doctors in regions where they were not available. In Latvia, the profession of physician's assistants or paramedics dates back to the 1960s. 3,842 physician's assistants were registered in our country in 2021, but their counts are still insufficient. The work of physician's assistants in emergency assistance is particularly important. Physician's Assistants are the main personnel in emergency medical service teams in the structure of the Emergency Medical Assistance Service in Latvia, and they also work in the medical units of the National Armed Forces. 250 vacancies have been unfilled in the Emergency Medical Assistance Service for a long period of time, and after the workload experienced during the Covid-19 pandemic, employees, who have reached their long service pension, do not want to continue working, Liene Cipule, Head of the Emergency Medical Assistance Service, reports in an interview to Latvian mass media.

One of indicators of the changes that are made in the course of the study process and study plan are comments in the questionnaires of graduates and students regarding study courses and the study programme. Students shall complete a study course assessment questionnaire for each study course in e-studies, in which there is an opportunity to express opinions and suggestions regarding the content of the study course, the methods for the implementation thereof, the competence of the instructor and the working style. At the end of the study process, students are invited to complete the study programme assessment questionnaire and express their opinion regarding the study process and satisfaction with their choice. Student activity in completing study course assessment questionnaires is variable, but the collected data evidence that from academic year 2018/2019 to academic year 2021/2022 an average of 40% of total students of the StP completed study course assessment questionnaires. The summary of data on study course assessment questionnaires evidences that the average assessment of students on a scale from 1 to 4 is 3.63 and was not lower than 3.45 in the accreditation period. This indicator is considered high and makes it possible to conclude that the content and quality of the study course are appropriate.

Based on the opinion expressed by students and proposals on the organisation of the study process, changes made to the study content – planning of study courses within semesters and years of studies.

Existing study courses have been improved and new study courses have been created in the StP, like Part A course “Disaster and Military Medicine”. The study course has been created based on the profession standard for physician’s assistant/paramedic approved in 2022, which provides for knowledge of work organisation principles in emergency medical situations, getting involved in the system of disaster medicine in liquidating the consequences of emergencies, as well as during military operations. The study course “Basic Statistics” has been created in Part B (restricted elective study courses) to provide students with an insight on the use of statistical methods, data visualisation basic principle, as well as basic information on the statistical methods used in medical publications and research and the interpretation of results, which will provide students with the possibility to study clinical trials and use this evidence-based information in research conducted during studies within the scope of qualification papers and in further professional activity.

When discussing the structure of the study programme and the sequence of courses within third year students and representatives of graduates, adjustments have been made to the StP planning – it was decided to start the study course “Research” already in semester 4, so that students can start the 3<sup>rd</sup> year of studies with completed and fully formulated topics of qualification papers. Changes have been introduced to the curriculum starting from academic year 2023/2024. As of academic year 2022/2023, the study course “Professionally Technical Skills” is started from semester 1 (earlier the course started in semester 2). Such changes to the planning make it possible for students to complete this study course in the 2<sup>nd</sup> year of studies and to start working as medical assistants in the Emergency Medical Assistance Service and in hospitals. A successfully passed objective structured clinical examination (not lower than 7 – condition of employers) provides the student with such an opportunity.

The evaluation questionnaires completed by students at the end of each semester have provided significant information on the quality of studies, evaluating the content of courses, their implementation methods, lecturer’s competence and work style. Based on the collected and analysed information, a lecturer was replaced, for example, in study courses “Internal Diseases” and “Clinical Pharmacology”, involving new perspective industry professionals – physicians – in the implementation of study courses.

Surveys of employers and graduates make it possible to evaluate the quality and compliance of learning outcomes with labour market requirements. Based on the recommendations of the

Emergency Medical Assistance Service as the largest employers the organisation of placement in the service. Upon consultations with the Head of the Competence Development Centre of the Emergency Medical Assistance Service, the content of the cooperation agreement and its annexes has been updated. The updated cooperation agreement provided for considerable improvements in the implementation of placement at the Emergency Medical Assistance Service and the resulting increase of the quality of placement in the future.

The results of employment surveys make it possible to conclude that 92% of graduates of the study programme “Physician’s Assistant” start or continue working in different health care institutions immediately after the end of the study process. Already during studies, a high percentage of students start working in health care (in academic year 2020/2021 13 (82%) out of 16 third year students had an employment relationship at the Emergency Medical Assistance Service). Students obtain invaluable additional practice during studies by working first as nurses, assistant nurses, and at later stages as medical assistants, in intensive therapy departments and the Emergency Medical Assistance Service.

In the *Dynamic University* (2020) Investigation of the competitiveness of Rīga Stradiņš University and RSU Red Cross Medical College Study Programmes and Compliance with Medium- and Long-Term Development Trends of the Labour Market and Industry conducted under the RSU order study, employers expressed their opinions about employment forecasts:

- the demand for qualified professionals will continue to grow if students remain in existing professions and do not switch to other sectors;
- there is a shortage of specialists and a personnel ageing trend is observed;
- there is a growing demand for highly qualified professionals able to use rehabilitation technologies and digital solutions;
- there is a shortage of specialists in regions, so digitisation of medicine can become a pressing;
- medical nurses and physician’s assistants are among the current professions.

The foregoing leads to the conclusion that there is a shortage of specialist physician’s assistants in the sector and the resulting importance of the study programme – graduates of the study programme are and will be required in the labour market.

Enclosed:

Annex 10. Employment of graduates.

**3.1.4. Statistical data on the students of the respective study programme, the dynamics of the number of the students, and the factors affecting the changes to the number of the students. The analysis shall be broken down into different study forms, types, and languages.**

In academic year 2022/2023, there were 24 budget-funded and 5 paid places in the study programme “Physician’s Assistant”. During the entire accreditation period, budget-funded study places were filled stably and in recent years (starting from academic year 2020/2021) studies covering their tuition fee from personal funds were admitted.

Since the beginning of the accreditation period (academic year 2016/2017), the number of enrolled

students has been rather stable. The number of enrolled students during the reporting period was from 27 (academic year 2017/2018) to 30 (academic year 2021/2022). A rapid increase in the number of enrolled students was observed in academic year 2022/2023, when the number of students enrolled to the first year reached 43, which is probably explained by the growing prestige of the profession due to the epidemiological situation in Latvia and in the world and the important role of the Emergency Medical Assistance Service during the pandemic.

Fluctuations in the number of students are observed in the study process as the number of students reduces in the first year of studies and increases in the 2<sup>nd</sup> and 3<sup>rd</sup> year, when students return from the academic leave or resume studies after exmatriculation. A comparatively higher number of students in the first year, which was academic year 2016/2017 in the reporting period, is from 36 to 43 (34 students in average). A considerable reduction in the number of students compared to the first year in the entire reporting period is observed in the second year of studies, which is explained by student drop-outs in the first year of studies. However, a positive trend is observed – student drop-outs in the first year of studies reduce proportionally compared to the initial years of the reporting period. In academic year 2016/2017, student drop-outs in the first year amounted to more than 60% (27), in academic year 2019/2020 – 40% (14) and in academic year 2021/2022 student drop-outs in the first year dropped to 21% (7). Positive trends in changes in the number of students are also observed in the second and third years – an annual, stable increase in the number of students, which is related to resuming of studies after academic leave and re-enrolment after exmatriculation.

The main reasons for academic leave are poor academic performance and withdrawal. Under the supervision of the study programme and branch director, talks are conducted with the students from whom applications regarding the termination of studies have been received, in which students reveal that studies are often difficult to combine with work and family life.

The number of graduates in the reporting period referred to above was variable, it varied from 7 (academic year 2016/2017) to 13 (academic year 2021/2022). The number of graduates planned for the academic year 2022/2023 is 19.

There are known problems with student mobility – student activity. Students of the study programme have limited opportunities to participate in mobility projects due to the specifics of the study programme. There are no such or similar professions and therefore study programmes in European countries. The countries where study programmes corresponding to the profession of physician's assistant/paramedic in Latvia are being implemented are Russia, Belarus and Ukraine. Given the current situation – Russia's war in Ukraine and the role of Belarus in it – there are justified obstacles to cooperation with these countries and student mobility projects.

Enclosed:

Annex 16. Statistical data on students.

### **3.1.5. Substantiation of the development of the joint study programme and description and evaluation of the choice of partner universities, including information on the development and implementation of the joint study programme (if applicable).**

Not applicable.

## 3.2. The Content of Studies and Implementation Thereof

**3.2.1. Analysis of the content of the study programme. Assessment of the interrelation between the information included in the study courses/ modules, the intended learning outcomes, the set aims and other indicators with the aims of the study course/ module and the aims and intended outcomes of the study programme. Assessment of the relevance of the content of the study courses/ modules and compliance with the needs of the relevant industry, labour market and with the trends in science on how and whether the content of the study courses/ modules is updated in line with the development trends of the relevant industry, labour market, and science.**

The first level professional higher education study programme “Physician’s Assistant” is a three-year (six-semester) full-time programme of 120 CP/180 ECTS, the graduation from which provides the qualification of a physician’s assistant. Each semester closes with a session during which the knowledge, skills and competences acquired by students are examined.

The content of study courses is complementary and sequential and provides an opportunity to acquire the knowledge, skills and competences necessary for the speciality of the physician’s assistant/paramedic. According to the annual electronic surveys and oral interviews of students, graduates and employers, study courses and their content comply with the needs of the relevant industry and labour market and science trends.

Since the beginning of the accreditation period in 2016, the content of the study programme has been gradually developed, improved according to industry and labour market, as well as health care trends. The development of StP is also ongoing based on the new profession standard of the physician’s assistant/paramedic (coordinated at the meeting of the Tripartite Cooperation Subcommittee on Vocational Education and Employment meeting of 10 August 2022, minutes No. 4). The curriculum includes new study courses such as “Basic Statistics”, “Civil Protection and First Aid” and “Disaster and Military Medicine”.

Based on the changes to the Law on Higher Education Institutions in 2022, significant corrections and improvements have been made to the Business module. Three new study courses have been created with a larger amount of CPs. The study course “Health Care Organisation and Legal Aspects” (2 CP/3 ECTS) was created by combining the study courses “Organisation of Health Care” (1 CP/1.5 ECTS) and “Legal Matters of Healthcare” (1 CP/1.5 ECTS). The combining will facilitate the acquisition of knowledge on health care organisation, policy and financing issues in Latvia and will provide an understanding of the quality management system in the health care system, linking it to legal issues. Another two study courses were created based on a similar (identical) scheme: “Language Communication and Professional Communication” (2 CP/ 3 ECTS) and “Basics of Business and Project Development” (2 CP / 3 ECTS). Such targeted combining of study courses and updating of content make it possible to reduce the number of final examinations and make it more difficult for students to relieve their tense session planning.

To achieve aims and learning outcomes StP “Physician’s Assistant” the thematic planning of StP envisages the structure of the programme, which includes study courses in the first year of studies, which enable the student to acquire understanding of the human body, its functioning in both physical and psychological aspects, for example, “Biology and Medical Genetics”, “Anatomy”, “Physiology (Biochemistry, Biophysics)”, “Introduction to Psychology and Sociology”, “Professionally

Technical Skills". The achievement of the outcomes of the study programme is ensured by students' ability to objectively assess the patient's overall condition by reasonably justifying it, taking into account objective data, to provide adequate medical assistance to patients of different ages, genders and cultures, to apply the medical procedures specified in the profession standard according to the specific case and situation.

The share of sector-specific study courses, such as "General Pathology", "Special Medicine", "Pharmacology", "Clinical Pharmacology", "Professionally Technical Skills", as well as study courses providing skills for conducting independent research – "Research", "Basic Statistics", is increasing in the range of study courses to be studied in the next semesters. As a result of successful mastering of the study courses, the student conducts a comprehensive examination, assessment and case diagnosis of for patients of all ages and genders, collects a patient's history, including current complaints, diseases, linking them to the social and family history, and, based on the patient's diagnosis – general state of health, is able to prescribe appropriate medicinal products, ensuring adequate administration of medications, identifying indications, contraindications and potential side effects of the medicinal product.

Different study courses are implemented throughout the study process, which develop communicative, pedagogical and organisational skills, for example, "Health Care Organisation and Legal Aspects", "Language Communication and Professional Communication", "Medical Ethics and Pedagogy", and the achieved outcome of the programme is also the ability of the student to properly draw up the documentation referred to in regulatory enactments. Using the acquired knowledge regarding work organisation and documents regulating it, the students will be able to organise and manage their own work and work of their colleagues, while educating the society, team members and patients.

During the time period since the beginning of the accreditation period (academic year 2016/2017) the study programme consists of Part A or compulsory elective courses (114 CP / 171 ECTS) or Part C or free elective courses (6 CP / 9 ECTS). Following the latest requirements, Part B or restricted elective study courses of 4 CP / 6 ECTS have been introduced in the study programme, which respectively change the volume of credit points – to 112 CP / 168 ECTS in Part A and to 4 CP / 6 ECTS in Part C (see Annex 19).

Clinical placements are implemented every year of studies in accordance with the courses mastered in the year of studies to promote mastering of students' practical skills and knowledge. The task of clinical placement is to ensure strengthening of the necessary professional skills. Study placements are coordinated with the relevant study courses in the curriculum. At the end of the first year of studies, students have placement of 4 CP / 6 ECTS, which includes study sections "Propedeutics" and "Electrocardiography" (each placement section of 1 CP / 1.5 CP), as well as placement (2 CP / 3 ECTS) in a clinical environment – in the Liepaja Regional Hospital (LRH), where students strengthen the knowledge and skills obtained in the study course "Professionally Technical Skills". The knowledge, skills and competence mastered in the study courses of the second year are strengthened in a placement at the Emergency Medical Assistance Service, LRS and family doctors practices. 6 weeks in total – 6 CP / 9 ECTS.

The structure and content of the study programme are created and reviewed on a regular basis in cooperation between students, academic staff of the branch and industry professionals. Student surveys on the content, organisation and other topical matters of the study programme are conducted at the end of each study semester. Representatives of two largest employers – the Emergency Medical Assistance Service and the Liepaja Regional Hospital (ensure both placement and further employment) and industry specialists, physician's assistants/paramedics working in outpatient care, for example, Aleksejs Safonovs (certified physician's assistant at the Emergency

Medical Assistance Service) and Gundega Zeme (certified outpatient care physician's assistant) are involved in the work of the quality council of the study programme, thus ensuring the compliance of StP with industry, labour market needs and scientific trends.

Enclosed:

Annex 17.1. Compliance of the study programme with the national educational standard.

Annex 17.2. Compliance of the study programme with the industry-specific regulations.

Annex 18.1. Mapping of the study courses for the achievement of learning outcomes of the study programme.

Annex 18.2. Compliance of the qualification to be acquired upon completion of the study programme with the professional standard.

Annex 19. Planning of the study programme (for each type and form of the implementation of the study programme).

Annex 20. Description of study courses.

**3.2.2. In the case of master's and doctoral study programmes, specify and provide the justification as to whether the degrees are awarded in view of the developments and findings in the field of science or artistic creation. In the case of a doctoral study programme, provide a description of the main research roadmaps and the impact of the study programme on research and other education levels (if applicable).**

Not applicable.

**3.2.3. Assessment of the study programme including the study course/ module implementation methods by indicating what the methods are, and how they contribute to the achievement of the learning outcomes of the study courses and the aims of the study programme. In the case of a joint study programme, or in case the study programme is implemented in a foreign language or in the form of distance learning, describe in detail the methods used to deliver such a study programme. Provide an explanation of how the student-centred principles are taken into account in the implementation of the study process.**

The study programme is implemented in accordance with an approved curriculum and in accordance with the study courses and course descriptions included therein.

Based on annually reviewed, updated and approved study course descriptions and the aims, tasks and outcomes included therein, lecturers use different **study methods** in working with students:

- lectures, including interactive lectures with a discussion, as well as video lectures, which enable students to learn study material at a convenient time and in a convenient manner, or to re-watch it if necessary, fostering better learning of study content, preparation for classes,

seminars, examination work;

- classes, seminars (including case analyses) that discuss specific topics included in the study course, train practical skills to collect and evaluate the results obtained during the examination of the patient, and document them. Manipulations related patient examination, transport, provision of vital functions are carried out;
- work in small groups – the method that develops students' skills of communication and mutual cooperation, skills to establish a dialogue and professional communication, skills to define and express an opinion, as well as the art of compromise. Students acquire the skills to perform patient examination and general examination by organ system, gather a history;
- students' independent work, studies on the e-platform that promotes students' independent learning skills, as well as motivates taking responsibility for their study process and its implementation. The choice of the form, organisation and test of student's independent work is determined and monitored by the head of the study course and the lecturers involved in the implementation of the course;
- simulation-based classes, both in collaboration with the Medical Education Technology Centre and under the guidance of course lecturers. Simulation-based education is an integral part of modern medical education. The new technologies open up unprecedented opportunities in preparing students for practical work in different medical institutions, allowing for the maximum preparation of students and refining practical skills in providing first aid, manipulations such as injections, catheterisation, intubation, desmurgy, skin suturing and resuscitation.

The application of these study methods promotes the principles of student-centred education and respects the different learning opportunities and styles of students as individuals, as well as past experience and level of knowledge. The student-centred education introduced and developed in the study process ensures cooperation between students and lecturers, as well as promotes regular feedback, which serves as a significant factor in the development of the study programme and improvement of its quality.

The different study methods used in the study process and their interaction enable students to learn, understand and use the knowledge, skills and competences acquired in the study process more qualitatively.

The regular assessment of the knowledge, skills and competences acquired by students is based on the RSU Academic Regulations I approved by the RSU Senate on 21 February 2023, available in Latvian [here](#), in English [here](#), from the section on the university website: Latvian – [here](#) (in the section “studies”), English – [here](#) (in the section “studies”).

**Formative and summative assessment** is used in the study process. Formative assessment takes place during everyday study process, when the lecturer asks control questions to the students or providing tests during classes, as well as by discusses the independent works of students providing feedback. Summative assessment takes place at the end of each study course as an examination. Written and oral examinations (test work, seminars, individual and group work assessments) are used for examining students' knowledge. At the end of each study course, the student must receive an assessment confirming the level of achievement of learning outcomes. At the beginning of each study course, the heads of the study course informs students about the assessment criteria. The study course description contains the planned study course outcomes, as well as assessment criteria and test types.

The assessment of students' achievements is based on general principles, which include the transparency of the assessment of knowledge and skills, the obligatory nature of the assessment, which requires a positive assessment of course content, i.e. at least “almost satisfactory” (4). The



diversity of test forms is ensured – several types of tests are used in assessment of learning outcomes of courses of the study programme: written tests, tasks, situation analysis, etc., oral tests of knowledge and demonstration of skills. The assessment methods conform to the content of the study course and measure the learning outcomes achieved.

Different **forms of examination** are used for examinations and other test work: written, oral examination; a computerised test in the *Moodle* environment; combined forms of examinations, such as the Objective Structured Clinical Examination (OSCE) consisting of two parts: theoretical knowledge test (a test) and practical part. OSCE is a typical type of examination used in health sciences, including in the physician's assistant's education process to test the performance and competence (knowledge, skills) of the student's clinical skills, such as communication with the patient, clinical examination, performing medical procedures, clinical decision-making, emergency assistance, clinical thinking/reasoning, interpretation of clinical outcomes. This type of examination concludes the study course "Professionally Technical Skills" allowing an objective assessment of students' theoretical and practical knowledge and skills, as well as their ability to use them in different situations under conditions close to clinical.

The study programme "Physician's Assistant" closes with the writing, defence of a qualification thesis and the state examination. The qualification paper and the state examination are assessed by the commission approved by a rector's order, where at least 50% of commission members are representatives of employers.

**During the placement**, student fills in a placement logbook. The placement supervisor assesses both practical skills and student's attitude towards the duties assigned during placement.

Study observations are recorded on the examination and test form developed by RSU, recorded in students' electronic record books, as well as are appended to personal files of students. Student achievements are analysed on a regular basis.

**3.2.4. If the study programme envisages an internship, describe the internship opportunities offered to students, provision and work organization, including whether the higher education institution/ college helps students to find an internship place. If the study programme is implemented in a foreign language, provide information on how internship opportunities are provided in a foreign language, including for foreign students. To provide analysis and evaluation of the connection of the tasks set for students during the internship included in the study programme with the learning outcomes of the study programme (if applicable).**

A placement of 20 CP / 30 ECTS provided and implemented in the process of implementation of the study programme. The objectives and tasks set for clinical placement are closely related to the learning outcomes to be achieved in the study programme, as well as the study courses implemented in the relevant year of studies, the content thereof – theoretical knowledge and skills learned during lessons. Clinical placement starts already in semester 2 of the first year of studies and continues in years of studies 2 and 3. Students have the opportunity to test and use theoretical knowledge and skills learned during the study process in real work. The organisation of clinical practice is regulated by the StP Clinical Placement Regulations and a description of the progress of each section of clinical placement. The duration and distribution of the placement conforms to the study Programme Placement Plan. The amount of clinical placement for the first year of studies is 4 CP / 6 ECTS. In the second year of studies, the amount of placement is 6 CP / 9 ECTS, while in the

third year of studies the total amount of placement is 10 CP / 15 ECTS – Qualification Placement.

Study placements are coordinated with the relevant study courses in the curriculum. “Propaedeutics”, “Electrocardiography” – placement in propaedeutics and electrocardiography (1 CP / 1.5 ECTS in each placement section). Also placement (2 CP / 3 ECTS) in the clinical environment – at Liepāja Regional Hospital, where students strengthen their knowledge and skills learned in the study course “Professionally Technical Skills” and “Propedeutics” – to be able to objectively assess the patient’s overall condition by reasonably justifying it, taking into account objective data and to apply the medical procedures specified in the profession standard according to the specific case and situation (in year 1).

The knowledge, skills and competences defined in the profession standard and learned in study courses of the second year of studies are strengthened during placement at the Emergency Medical Assistance Service, the Liepāja Regional Hospital providing emergency medical assistance in critical situations to patients of all ages and genders and emergency medical assistance in case of injuries and extreme situations in cooperation with the Fire and Rescue Service, the police, the Centre of Emergency and Disaster Medicine within the scope of their competence and under supervision of the qualified placement supervisor. Students conduct a comprehensive examination, evaluation and case diagnosis of patients of all ages and genders, collect patient’s history, including current complaints, diseases, linking social and family history. Based on the patient’s diagnosis and general state of health appropriate medicinal products will be prescribed and adequate administration of medicinal products will be ensured observing the principles of aseptics and antiseptics, identifying indications, contraindications and potential side effects of the medicinal product and informing the patient of their pharmacological effects and conditions of use. The total placement period in the second year of studies is 6 weeks – 6 CP / 9 ECTS.

During placement, the student works not less than 40 academic hours per week, which correspond to 30 astronomical hours (for example, five working days six hours each). The student works under supervision of the placement supervisor and is involved in the daily work. The student reflects his or her daily work in a placement logbook writing placement goals, describing actions for their achievement, marking the specific professional skills used, conclusions and self-assessment; student’s work during placement is assessed by the placement supervisor. The student submits a placement logbook drawn up in accordance with the requirements to the study programme director within three days after the placement and the study programme director assesses it. A positive assessment for placement is provided if the student has worked 100% of the intended placement hours in accordance with the placement programme and obtained a positive assessment at each place of placement, that is not less than 9 points (which correspond to 4), as well as has submitted a placement logbook drawn up in accordance with the requirements in a timely manner, had a talk with the study programme director. The talk includes the self-assessment of placement by the student and the placement logbook reflects the analysis of information, the evaluation of positive and negative facts.

During placement students complete a placement logbook, annexes to which, for example, a specific assessment of professional skills, have been drawn up in accordance with the year of studies, the placement section and the place of placement, for example, at the Emergency Medical Assistance Service, the annex to the placement logbook “Specific skills” has been developed in cooperation with employees of the service and applicable for the potential skills to be learned.

Placement and search for placement places are organised in a centralised way through RSU Liepāja Branch (LB) – clinical placement places are provided to students. Clinical placement is mainly implemented at the Emergency Medical Assistance Service, the Liepāja Regional Hospital (the largest support centres in regions are in Kuldīga, Ventspils, Liepāja, as well as in Riga), at Liepāja

Regional Hospital, Priekules Hospital, family doctors' practices. Students can also choose a place for placement and express a wish to have placement in the medical institution selected by them. In the cases, when a student is interested in a specific place for clinical placement, the programme director, having listened to the student's wishes, shall evaluate the potential place of placement and its conformity to the aims and tasks of placement. It is established whether the place for clinical placement has a proper placement supervisor, as well as whether the potential placement implementation place is interested in cooperating with the RSU LB in the implementation of placement. If the assessment is positive, a cooperation agreement is concluded with the institution and the new placement supervisor.

Before each clinical placement, all the lecturers/placement supervisors involved in the placement receive an invitation to participate in the meeting of placement supervisors, as well as receive placement organisation documents electronically. New, recently involved placement supervisors are proposed individual talks with the programme director on progress, requirements and assessment of placement.

Enclosed:

Annex 9. Description of the organisation of placement of the students.

### **3.2.5. Evaluation and description of the promotion opportunities and the promotion process provided to the students of the doctoral study programme (if applicable).**

Not applicable.

### **3.2.6. Analysis and assessment of the topics of the final theses of the students, their relevance in the respective field, including the labour market, and the marks of the final theses.**

The writing and defence of a qualification paper is a compulsory part of the state examination of the study programme. Students write their qualification paper (QP) in accordance with the requirements of the RSU Regulations on student's graduation paper. These documents are available in Latvian [here](#), in English [here](#), from the section on the university website: Latvian – [here](#) (in the section "Pētnieciskais darbs"), English – [here](#) (in the section "Scientific theses").

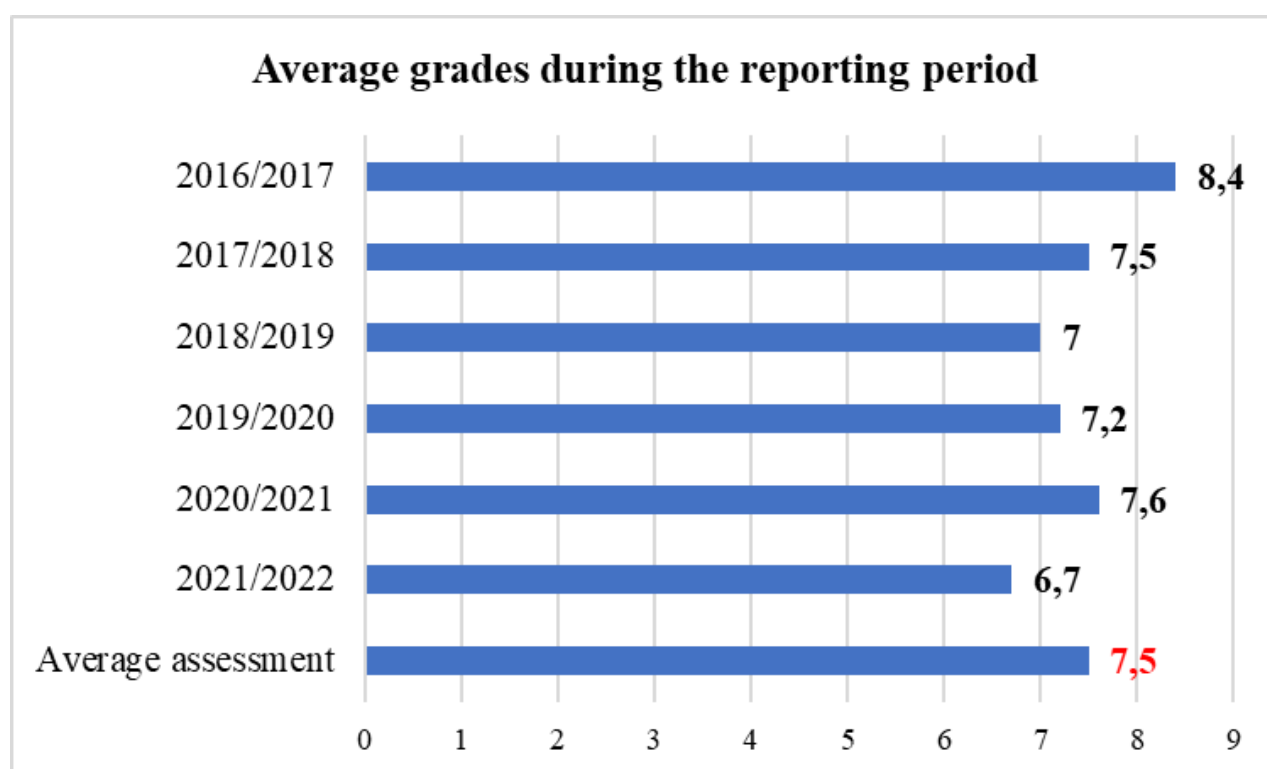
Thematic directions of graduation papers are defined in accordance with development trends and latest developments in the industry and labour market, interests and specialisation directions of students and QP supervisors. Students choose topics independently or upon consulting with lecturers and formulate the topic of their QP together with QP paper supervisors and the head of the study course "Research".

The students' qualification papers drafted during the reporting period (academic year 2016/2017-2021/2022) can be grouped into several thematic areas.

- **Communication in a professional environment**, for example, QP "Experience of

communication between emergency assistants and parents of children in emergency medical care”, “Inter-institutional cooperation between health care professionals in the provision of high quality care in the emergency phase”, “Staff views on drowsiness, fatigue, communication and management in emergency medical service teams”.

- **Knowledge of various groups in society about health and disease-related issues**, for example, “Parents’ knowledge about prevention and first aid in case of chemical burns in infants”, “Young people’s knowledge about hypothermia and first aid principles”, “Knowledge of persons who learned first aid skills and their readiness to use them in practice”.
- **Experience and opinions of various groups in society about health-related issues**, for example, “Medication compliance of geriatric patients in case of polypharmacy”, “Patient satisfaction with the Emergency Medical Service”, “The opinion of emergency medical workers on occupational safety during pandemic”.
- **Emergency care at the pre-hospital stage**, for example, “Knowledge of the residents of Kurzeme region about anaphylactic shock and first aid in prehospital stage”, “Application and availability of ultrasonography at the stage of emergency medical assistance”, “Knowledge of persons who have learned first aid skills and their readiness to use them in practice”.
- **In the role of a physician’s assistant as a medical practitioner in patient care at the hospital stage**, for example, “Patients views on post-operative cholecystectomy education and physician’s assistants’ involvement”.



	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	Average grade
Grade	8,4	7,5	7	7,2	7,6	6,7	7,5

Figure 1. **Average assessment of qualification papers by academic years**

The assessments of students’ qualification papers drafted during the reporting period (academic year 2016/2017-2021/2022) vary from 4 to 10, with the most frequent assessment (assessment mode) being 8, while the average assessment by years of studies remained relatively stable – 7.5.

Enclosed:

Annex 22. Topics of students' graduation papers.

### 3.3. Resources and Provision of the Study Programme

#### 3.3.1. Assessment of the compliance of the resources and provision (study provision, scientific support (if applicable), informative provision (including libraries), material and technical provision, and financial provision) with the conditions for the implementation of the study programme and the learning outcomes to be achieved by providing the respective examples.

Studiju process norisinās Rīgas Stradiņa universitātes Liepājas filiāles telpās, kuras ir labi aprīkotas un modernas. Visā ēkā ir pieejams bezmaksas internets, kā arī publiski pieejami dažādās mācību iestādes ēkas vietās izvietoti datori ar pastāvīgu interneta pieslēgumu. Auditorijas ir aprīkotas ar datoriem ar interneta pieslēgumu un projektoriem (tostarp interaktīviem). Aprīkojums ļauj kvalitatīvi nodrošināt studijas gan klātienē, gan nepieciešamības gadījumā attālināti – *Zoom*, *Teams* platformās. Studējošajiem ir iespēja bez maksas lejuplādēt *MsOffice* programmatūru savos personīgajos datoros studiju darbu izpildei un izmantot *SPSS (Statistical Package for the Social Sciences)* programmu. Koplietošanas telpās ir ierīkotas atpūtas zonas un pieejamas mikroviļņu krāsnis, elektriskās tējkannas un dažādi tirdzniecības automāti.

Studiju procesa nodrošināšanai StP tiek izmantota studiju virzienam veidotā studiju bāze – bibliotēka, mācību telpas, tehniskais nodrošinājums. StP vajadzībām izveidota specializēta profesionāli tehnisko manipulāciju telpa, kurā izvietota materiāli tehniskā bāze atbilstoši profesijas specifikai.

Telpā izvietoti vairāki simulācijas manekeni/lelles, kas paredzēti profesionālo prasmju un kompetenču apgūšanai un ir pietuvināti reālajai praksei:

- i/v, i/m un s/c injekciju simulāciju manekeni;
- intraosālās pieejas simulācijas manekeni, adatas un intraosālās pieejas ierīce *BIG (Bone Injection Gun)*;
- defibrilators;
- CPR apmācību manekeni (elpceļu atvēršanas, mākslīgās elpināšanas un sirds netiešās masāžas treniņiem):
- CPR manekens *Little Anne*,
- *SimMan*,
- CPR manekens *Anne*;
- elektiskais vakuumsūknis elpceļu caurlaidības nodrošināšanai;
- traumu simulācijas manekens;
- transporta un imobilizācijas šinas (pneimatiskās), Krāmera šinas, ekstremitāšu imobilizācijas šinas (*Blue splint*), vakuuma matracis, kakla šinas;
- elektrokardiogrāfi;
- simulatori klīnisko prasmju treniņam:
- auskultācija (plaušu, sirds),

- intubācija un ventilācija,
- dažādu akūtu stāvokļu programmēta simulācija,
- defibrilācija,
- EKG pieraksts,
- urīnpūšļa katetrizācija,
- nazogastrālās zondes ievadīšana,
- intubācijas simulācijas,
- pirmā palīdzība pacientam ar elpceļu nosprostojumu ar svešķermeni,
- acu un ausu izmeklēšanas metodes,
- grūtnieču izmeklēšana un dzemdību simulācijas.

Liepājas filiāles budžetā ieplānoti līdzekļi materiāli tehniskās bāzes papildināšanai (piemēram, simulēta operatīvā transportlīdzekļa modeļa izveidei filiāles telpās, manekenu atjaunošanai un papildināšanai, specializētās aparatūras, piemēram, *Lifepak*, iegādei).

Jau šobrīd studentiem ir iespējams trenēt prasmes klīniskajās procedūrās (piemēram, injekcijas, reanimācija, intensīvā terapija, ergonomika, katetrizācija, intubācija) modernās un klīniskajai videi pietuvinātās telpās.

Bibliotēka nodrošina docētājiem un studējošajiem pieeju Latvijas un starptautiskajiem elektroniskajiem resursiem, tostarp informācijas sabiedrības veselības jomās. Bibliotēkas darbinieki studentiem un docētājiem regulāri nodrošina konsultācijas bibliotēkas resursu lietošanā.

Pielikumā:

23.2. pielikums. Informatīvās un metodiskās bāzes novērtējums par bibliotēkas resursiem Liepājas filiāles studiju programmu īstenošanai saskaņā ar prasībām vadlīnijās.

23.3. pielikums. Informatīvās un metodiskās bāzes novērtējums par IT resursiem.

### **3.3.2. Assessment of the study provision and scientific base support, including the resources provided within the framework of cooperation with other science institutes and higher education institutions (applicable to doctoral study programmes) (if applicable).**

Not applicable.

### **3.3.3. Indicate data on the available funding for the corresponding study programme, its funding sources and their use for the development of the study programme. Provide information on the costs per one student within this study programme, indicating the items included in the cost calculation and the percentage distribution of funding between the specified items. The minimum number of students in the study programme in order to ensure the profitability of the study programme (indicating separately the information on each language, type and form of the study programme implementation).**

It is planned to fund the study programme from state budget funds and the funds of individuals and

legal entities setting the tuition fee in accordance with the state budget funding without social security of EUR 5705 per year of studies. The tuition fee can be subject to discounts in accordance with internal norms and regulations. The number of students planned to be achieved in the study programme in three years of studies is 72 students, enrolling 28 students in the first year, planning a drop-out of 6 students in the second year of studies, with the number of students remaining the same in the third year. Such a number of students is optimal to ensure a high-quality study process and to make the study programme cover its implementation, as well as development costs.

The funding is used for staff remuneration, attraction of visiting assistant professors, taxes, maintenance of IT infrastructure, purchase of equipment and devices, and study visit costs. In addition to the direct costs of implementation of lectures and classes, the StP must cover infrastructure maintenance costs (facilities, IT solutions) and other RSU common resources used in the StP (Student Services, Library, organisation of the study process, grant for the Student Union and other support and administrative functions).

The StP is implemented by RSU Liepāja Branch. Remuneration of the academic staff in the first year of the StP is planned to be around EUR 50 thousand.

The study programme is currently profitable, provided by funding for 78 state-funded study places with one state-funded study place of EUR 6308 per academic year. An average of 73 students currently study in the study programme in the academic year, which provides a positive financial result. In order to ensure positive profitability further, the minimum number of students in the group prescribed in RSU internal laws and regulations - 15 - must be admitted to the study programme.

**Table 2. Information on student costs**

<b>Name</b>	<b>Result with the existing tuition fee</b>
Average income per student, EUR	5654
Average cost per student, EUR	5166
Academic staff, %	35
Department resources, %	24
Scholarship costs, %	7
Fixed costs, %	6
Overheads, %	28

### **3.4. Teaching Staff**

**3.4.1. Assessment of the compliance of the qualification of the teaching staff members (academic staff members, visiting professors, visiting associate professors, visiting docents, visiting lecturers, and visiting assistants) involved in the implementation of the**

**study programme with the conditions for the implementation of the study programme and the provisions set out in the respective regulatory enactments. Provide information on how the qualification of the teaching staff members contributes to the achievement of the learning outcomes.**

Both permanent and non-staff lecturers of the branch, as well as lecturers of different RSU departments are implemented in the implementation of the study programme. Lecturers with relevant education (Bachelor's degree, Master's degree, doctoral degree) and experience in the field (industry representatives) are involved in the implementation of study courses. Three of the teaching staff involved in the implementation of the programme have been elected to RSU. (See Annex 24.7 for more information).

**Dina Berloviene** graduated from the Faculty of Medicine of the University of Tartu majoring in sports medicine, and obtained a Master's degree in education sciences. She has experience in rehabilitation, leading a children's rehabilitation centre, as well as in the implementation of the study course "Rehabilitation" to students of the study programme "Nursing Studies". Her education and professional experience make it possible to implement study courses like "Anatomy" and "Gerontology" in StP "Physician's Assistant". Dina Berloviene completed doctoral studies in pedagogy at Liepaja University. Author (3) and co-author (3) of several scientific articles.

**Inga Petermane** is a practicing paediatrician with extensive experience both as a paediatrician and RSU lecturer working with students. Until 2017, she was the director of the study programme "Physician's Assistant" at Liepāja Branch. She also has been a lecturer of StP "Nursing Studies" for many years. Inga Petermane is the head of study courses "Propedeutics", "Pharmacology" and "Paediatrics", obtained a Master's degree in education sciences.

**Gunta Bēta** is the head of study courses "Health Care Organisation and Legal Aspects" and "Medical Ethics and Pedagogy". Lecturer of RSU Liepāja Branch with extensive experience in study work, coordinated the study programme "Nursing Studies" at Liepāja Branch. Professional knowledge is based on 10 years of experience in practical work in health care as a nurse and as a head nurse of the department. Obtained a doctoral degree in pedagogy, author of several scientific papers.

**Dita Role** is the director of RSU Liepāja Branch with extensive experience in organisational and management work. Lecturer of study courses "Medical Ethics and Pedagogy", "Language Communication and Professional Communication" and "Basics of Business and Project Development". Completed doctoral studies in pedagogy at Liepaja University.

**Dagnija Deimante** obtained a Master's degree in English language philology at the University of Latvia and a doctoral degree in pedagogy at Liepaja University. The updated (2022) profession standard for the physician's assistant/paramedic requires that the physician's assistant is not only fully proficient in and use the official language, but is also able to communicate with the customer/patient in at least two foreign languages. Years of experience in implementing the study course "Medical Terminology in English" at Liepāja Branch in the first year of studies. Head and lecturer of the study course "Medical Terminology in Latin" for several years. Having received a Fulbright teacher scholarship in academic year 2005/2006, she taught English at Avondale School, State of Georgia, United States. Author of scientific articles.

**Līga Ēriksone** is a lecturer with many years of experience as a lecturer and as a supervisor and reviewer of qualification papers and Bachelor's theses. Involved in the implementation of several courses in StP, for example, "Research", "Professionally Technical Skills", "Biology and Medical



Genetics" and other. The lecturer has a professional Bachelor's degree in social work, Master's degree in social work, Bachelor's degree in nursing studies and Master's degree in health sciences.

**Mihails Dolguševs** is a resuscitator, anaesthesiologist, algologist. Author of several scientific papers. Head of the Emergency Medical Centre of Liepāja Regional Hospital. Works as anaesthesiologist and resuscitator at the hospital and at the Emergency Medical Assistance Service. At Liepāja Regional Hospital, Mihails Dolguševs is also the coordinator of cooperation at RSU, and participates in the implementation of the StP "Physician's Assistant" at [RSU Liepāja Branch](#). Involved in reading lectures and classes in the study course "Intensive Therapy" and in the work of the quality council of StP "Physician's Assistant", where he actively participates in resolution of important matters relating to the improvement of the quality of studies in StP.

**Aleksejs Safonovs** is a lecturer, member of the study programme quality council and graduate of RSU Liepāja Branch – certified physician's assistant at the Emergency Medical Assistance Service with many years of experience in practical work and student training. The lecturer is involved in several study courses (for example, "Professionally Technical Skills", "Electrocardiography", "Civil and Environmental Protection, First Aid") as the head of course and one of course lecturers.

From 1 January 2017 to 1 October 2022, 12 lecturers of the study programme "Physician's Assistant" participated in continuing education activities of the Centre for Educational Growth attending more than 60 training activities of different content. The lecturers of the study programme "Physician's Assistant" spent 1212 academic hours on mastering continuing education activities.

The lecturers participated in the following activities, for example: "Creating animated visual study materials"; "Remote group work of students using the Miro tool"; "Teaching in intercultural environments"; "Think tank: feedback as a sources of cognition and possibility to improve oneself"; "Inclusive digital design"; "Drafting of interactive study materials (H5P)"; Interactive presentations and real-time feedback in the Mentimeter tool"; "How to make complex easily understandable? Interactive training game "Cell""; "How to promote the acquisition of transversal skills relevant to the working environment in the study process"; "Potential of conflict for building cooperation"; "Research methodology and statistical processing of data"; "Art of elocution in pedagogical work"; "Content visualisation in presentations"; "Assessment approaches and types of examinations in remote studies".

Enclosed:

Annex 24.7. Analysis of the composition of the teaching staff.

### **3.4.2. Analysis and assessment of the changes to the composition of the teaching staff over the reporting period and their impact on the study quality.**

During the reporting period, there were several significant changes in teaching staff, which were based on the data provided in the summaries of results of study course assessment questionnaires or were related to the choice made by lecturers themselves to terminate their employment relationship for personal reasons, change of place of residence or workplace. In cases where the need to change a lecturer in one of the study courses was related to an inadequate or low assessment of the programme director, for example in the context of a lecture or a class peer

observations, or to criticism and low assessment by students, the change in teaching staff is a targeted measure taken by previously analysing the mistakes made and the necessary changes to improve the quality of the programme. Young prospective doctors and residents in leading clinical study courses have been attracted and this is a contributing factor to study quality. Examples include surgeon of Liepaja Regional Hospital **Edgars Maļcevs** and traumatologist **Mārtiņš Reteris** in the study course “Surgery”, resident doctor **Aleksandrs Vasiljevs** and residency graduates, family doctors **Krista Ošeniece** (“Oral Diseases”), who have engaged with great enthusiasm and dedication in the implementation of the Liepaja Branch study programme “Physician’s Assistant”, providing a qualitative and scientific research-based study process and receiving positive feedback from students.

The programme also employs lecturers representing employers, for example, **Mihails Dolguševs**, head of Liepaja Regional Hospital Emergency Assistance Centre and doctor-resuscitator of the Emergency Medical Assistance Service. Several leading doctors of Liepaja Regional Hospital are involved in the implementation of placement and clinical placement: **Arta Gertnere**, head doctor of the Haemodialysis Department of Liepaja Regional Hospital, internist-nephrologist of Kurzeme Urology Centre (owner of the title of Liepaja inhabitant of 2019); doctor, cardiologist **Kristaps Šablinskis**; chief physician’s assistant of the Liepaja Team Support Centre of the Emergency Medical Assistance Service **Ieva Ventaskraste**, providing support for organising placement in the Liepaja Team Support Centre of the Emergency Medical Assistance Service.

During the reporting period, the position of several lecturers involved in the implementation of the programme has changed from acting lecturer to Assistant Professor (Dita Role and Dina Berloviene) based on doctoral studies. In 2017, Assistant Professor Gunta Bēta received a doctoral degree in pedagogy complementing staff with doctoral degrees of the Liepāja Branch.

Over the past five years, the programme director (formerly head) changed several times, initiated by both heads themselves and branch management. Changes in personal life that prevented them from continuing work in that position, as well as weaknesses, problems and reluctance to change the working style identified by branch management were the reasons.

**3.4.3. Information on the number of the scientific publications of the academic staff members, involved in the implementation of doctoral study programme, as published during the reporting period by listing the most significant publications published in Scopus or WoS CC indexed journals. As for the social sciences, humanitarian sciences, and the science of art, the scientific publications published in ERIH+ indexed journals or peer-reviewed monographs may be additionally specified. Information on the teaching staff included in the database of experts of the Latvian Council of Science in the relevant field of science (total number, name of the lecturer, field of science in which the teaching staff has the status of an expert and expiration date of the Latvian Council of Science expert) (if applicable).**

Not applicable.

**3.4.4. Information on the participation of the academic staff, involved in the implementation of the doctoral study programme, in scientific projects as project managers or prime contractors/ subproject managers/ leading researchers by specifying**

**the name of the relevant project, as well as the source and the amount of the funding. Provide information on the reporting period (if applicable).**

Not applicable.

**3.4.5. Assessment of the cooperation between the teaching staff members by specifying the mechanisms used to promote the cooperation and ensure the interrelation between the study programme and study courses/ modules. Specify also the proportion of the number of the students and the teaching staff within the study programme (at the moment of the submission of the Self-Assessment Report).**

Within the framework of the study programme, cooperation between the lecturers of different study courses is promoted to create sequential content of study courses and the planning of the course by study semesters, thereby ensuring succession, when the content of previous mastered study courses and the knowledge learned serve as a basis for successful mastering of the next courses. Attention is also paid to adapt the content of the mastered study course to general aims and learning outcomes of the programme.

The Director of StP conducts discussions with lecturers of study courses to promote the implementation of better study courses on the basis of the StP learning outcomes and the evaluations provided by students. Individual discussions with the lecturers involved in StP are taking place, evaluating students' course assessment questionnaires – positive and negative evaluation noted there and recommendations provided by students for improvement of the quality of study courses.

Cooperation is provided in the context of peer observations where teaching staff has the opportunity to observe colleagues' experience and working methods in person and to take as a basis, for example, their professional practice. Such cooperation is particularly relevant in the training and consultation of new teaching staff.

Evaluation and discussion of the content of study examinations and state examinations take place during the quality council meetings and extended quality council meetings, where both permanent and invited lecturers participate. At the meetings of the academic staff of the branch, lecturers are informed regarding innovations in the study process, the work tasks to be performed, as well as the joint evaluation of the study process and the learning outcomes. Lecturers share their experience regarding the organisation of the study process in their study courses.

The ratio of the number of students and teaching staff in the study programme: 73 students and 34 lecturers. The ratio of the number of students and teaching staff is 2.1.

# Annexes

III - Description of the Study Programme - 3.1. Indicators Describing the Study Programme		
Sample of the diploma and its supplement to be issued for completing the study programme	24.1_Anx_Diploma and supplement_1LPSP Phys_Assist (5).pdf	24.1_pielik_Diploms un pielikums_1LPSP Arsta paligs (2) (2).pdf
For academic study programmes - Opinion of the Council of Higher Education in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions (if applicable)		
Compliance of the joint study programme with the provisions of the Law on Higher Education Institutions (table) (if applicable)		
Statistics on the students in the reporting period	16_Anx_Statistical data_students_Phys_Assist.pdf	16_pielik_Arsta_paligs_studejoso statistika.pdf
III - Description of the Study Programme - 3.2. The Content of Studies and Implementation Thereof		
Compliance with the study programme with the State Education Standard	17.1_Anx_Compl_with_Nat_Ed_Stand_Phys_Assist.pdf	17.1_pielik_Atbalst_valsts_izgl_stand_1LPSP Arsta paligs.pdf
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard or the requirements for professional qualification (if applicable)	18.2_Anx_Compliance_with_professional standart_Phys_Assist.pdf	18.2_profesijas standarta kartejums_Arsta paligs (1).pdf
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)	17.2_Anx_Compl_with_Industry-Specific_Regul_Phys_Assist.pdf	17.2_pielik_Atbalst_nozares_spec_regul_Arsta_paligs.pdf
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	18.1_Anx_St_course_mapping_to_achieve_learn_out_Phys_Assist.pdf	18.1_pielik_St_kursu_kartej_st_rezultatu_sasn_Arsta paligs.pdf
The curriculum of the study programme (for each type and form of the implementation of the study programme)	19_Anx_Study plan_StP Physicians assistant.pdf	19_pielik_1LPSP Arsta paligs_planojums.pdf
Descriptions of the study courses/ modules	20_Anx_Study_course_description_Phys_Assistant.pdf	20_pielik_Kursu_apr_Arsta_Paligs.pdf
Description of the organisation of the internship of the students (if applicable)	9_Anx_Student placement organisation_Phys_Assist.pdf	9_pielik_Studejoso prakses apraksts_Arsta paligs.pdf
III - Description of the Study Programme - 3.4. Teaching Staff		
Confirmation that the academic staff of the doctoral study programme includes not less than five doctors, of which at least three are experts approved by the Latvian Council of Science in the branch or sub-branch of science in which the study programme intends to award a scientific degree (if applicable)		
Confirmation that the academic staff of the academic study programme complies with the requirements specified in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions (if applicable)		

# Medicine (49721)

Study field	Health Care
ProcedureStudyProgram.Name	Medicine
Education classification code	49721
Type of the study programme	Second level professional higher education programme (length of full time studies at least 5 years)
Name of the study programme director	Guntis
Surname of the study programme director	Bahs
E-mail of the study programme director	Guntis.Bahs@rsu.lv
Title of the study programme director	Dr. Med.
Phone of the study programme director	
Goal of the study programme	To create an opportunity for students, through the study content, to acquire the knowledge, skills, competences, and ethical qualities necessary for the implementation of modern health care based on the science of doctor's profession for each individual and for society as a whole.
Tasks of the study programme	<p>1) to give students the opportunity to build on the education obtained at the previous level in the study of basic sciences;</p> <p>2) to implement a consistent and systematic organisation of study courses, which includes basic sciences, pre-clinical sciences, clinical sciences and study placement (the sequence ends with the development and defence of students' research work and state examination);</p> <p>3) to include in the study content access to knowledge, the opportunity to develop the skills and competences that are necessary to achieve the objective of the study programme and meet the requirements of doctor's profession;</p> <p>4) to ground the said knowledge, skills and competences in internationally recognised, scientifically proven facts and findings; to enable students to develop their scientific creativity and a creative approach in their activities;</p> <p>5) to serve the interests of promoting the health, combating disease and ensuring well-being of society as a whole.</p>

Results of the study programme	<p>1. The student is able to demonstrate profound knowledge and understanding of the regularities of the structure and functionality of human body, mechanisms and interrelationships of the systems, and to formulate the role and place of each component in a healthy human being.</p> <p>2. To recognise deviations from normal structure and functionality, to explain the nature and consequences thereof for human health as a whole and for individual human systems. To show the impact of diseases on the body in different situations and to creatively make a prognosis about progress, complications, and outcome of the disease. To describe interactions among the changes caused by the disease, as well as to define the circumstances promoting or delaying the development of the disease.</p> <p>3. To formulate specific tasks in different conditions and to organise one's activities in such a way as to select the most appropriate treatment methods in an optimal manner, to plan measures in an integrated manner, including medical interdisciplinary activities, to select modern means for treatment of a patient and disease prevention, to integrate the knowledge generated by medical branches into a single vision for modern health care.</p> <p>4. Able to organise health care for a patient in a manner based on efficient principles, using the possibilities of the health care system, creatively adapting them to the patient's individual needs, if necessary, to find ethical and modern solutions in the area of health care in favour of the patient</p> <p>5. Able to independently use the theory and problem-solving skills to evaluate patient's health in general, as well as the condition of each system. In case of health disorders, able to identify the nature and causes thereof, explain the circumstances of the occurrence thereof, to differentiate and explain differences among diseases.</p> <p>6. Able independently direct the development of one's competence and use modern self-improvement techniques, including simulation-based methods to use only patient-safe tools, methods, and measures.</p> <p>7. Able to select and implement evidence-based treatment and individualised, creative approach to the patient, depending on the therapeutic needs, able to organise one's work in a manner allowing to get an optimal result for the improvement of the patient's health in a non-standard situation, able to use therapeutic methods and tools in accordance with the latest scientific conclusions and guidelines.</p> <p>8. Able to organise cooperation, including participation of specialists of different fields, to select the most appropriate work approaches, to deal with non-standard situations, to assume responsibility for the achieved diagnostic or therapeutic results and to analyse them. To communicate with the patient and their relatives in a legally correct and ethical manner. To establish or integrate into a business and apply basic legal and other knowledge in one's work.</p> <p>9. To provide emergency assistance and to know how to use manipulations corresponding to the profession standard in a manner safe for the patient, improving one's skills on a regular basis using innovative techniques and methods.</p> <p>10. Able to integrate knowledge from different fields of medicine, to use it in practice in a manner optimal for the patient, to participate in research and to contribute to the creation of new diagnostic or therapeutic methods, to demonstrate understanding and ethical responsibility for the results of one's activities.</p> <p>11. Able to use one's knowledge and skills to create a treatment plan for the patient using the latest scientific achievements, to organise medical treatment and to solve problems using a creative approach and a holistic view of the problem.</p> <p>12. Able to independently formulate and critically analyse complex medical situations, including urgent conditions, to justify decisions, conducting an additional analysis, if necessary, to achieve an optimal treatment result, to critically evaluate it and recommend further steps assuming responsibility for the planned solutions.</p>
Final examination upon the completion of the study programme	National examination

# Study programme forms

## Full time studies - 6 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	<i>6</i>
Duration in month	<i>0</i>
Language	<i>latvian</i>
Amount (CP)	<i>240</i>
Admission requirements (in English)	<i>Secondary education</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	<i>-</i>
Qualification to be obtained (in english)	<i>Medical doctor's degree</i>

## Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

## Full time studies - 6 years - english

Study type and form	<i>Full time studies</i>
Duration in full years	<i>6</i>
Duration in month	<i>0</i>
Language	<i>english</i>
Amount (CP)	<i>240</i>
Admission requirements (in English)	<i>Secondary education Studies in English in require knowledge of English of at least B2 level.</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	<i>-</i>
Qualification to be obtained (in english)	<i>Medical doctor's degree</i>

## Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

### 3.1. Indicators Describing the Study Programme

**3.1.1. Description and analysis of changes in the parameters of the study programme made since the issuance of the previous accreditation form of the study field or issuance of the study programme license, if the study programme is not included on the accreditation form of the study field, including changes planned within the evaluation procedure of the study field evaluation procedure.**

Table 1. Changes in Parameters of the Study Programme (StP)

<b>No.</b>	<b>Parameter</b>	<b>Description and analysis of changes in StP parameters during the accreditation period (until 2022)</b>	<b>Planned changes within the assessment procedure (after the accreditation)</b>
1.	Study direction	—	—
2.	Title of the StP	—	—
3.	Code according to the Latvian Education Classification	—	—
4.	Director of the StP	—	—
5.	Scientific degree of the director of the StP	—	—
6.	Objective of the StP	—	—
7.	Tasks of the StP	—	—



<b>No.</b>	<b>Parameter</b>	<b>Description and analysis of changes in StP parameters during the accreditation period (until 2022)</b>	<b>Planned changes within the assessment procedure (after the accreditation)</b>
8.	Learning outcomes to be achieved	—	—
9.	Final examination upon the completion of the StP	—	—
10.	Type and form of studies	—	—
11.	Duration of implementation	—	—
12.	Language of implementation	—	—
13.	StP amount (CP/ ECTS)	—	—
14.	Admission requirements	—	—
15.	Degree to be awarded	—	—
16.	Qualification to be awarded	—	—
17.	Place of implementation	—	—

Table one clearly shows that no significant changes to the programme have been made since the approval of changes in the content of the study programme Medicine at the Quality Agency for Higher Education (QAHE) of the Academic Information Centre (AIC) at its Study Quality Commission (SQC) (decision No. 2020/28-I of 1.07.2020).

The abovementioned changes were implemented in 2020 to promote competitiveness of study programmes in the context of European and global education systems, as well as to implement the strategy of Rīga Stradiņš University (RSU). Synchronisation of the study programme “Medicine” with similar study programmes of known and developed European universities was introduced. Content

was compared with the content of several universities in Germany, Austria, Scandinavia, Italy and similarities and differences were stated in the content of the programmes. To promote internationalisation and more convenient interstate exchange of students for studies, a new, modern programme synchronised with European universities was developed in cooperation with almost all the departments of the Faculty of Medicine and other faculties and their heads. The working title of the new programme was “Medicine 2.0”. As a result of the changes made, the study programme gained much greater international visibility and equivalence from the viewpoint of students living in Europe. On 9 July 2020, the new study programme “Medicine” obtained approval from AIC QAHE to the changes made to the study programme “Medicine 2.0” compared to the already accredited programme. It should be noted that, as a result of these changes, the study programme “Paediatrics” was consolidated into the programme “Medicine”. The programme “Paediatrics” does not continue to exist as a separate programme, but students can also study the area, in which they are specifically interested in, in the programme “Medicine” by choosing appropriate B courses and acquiring a specific set of knowledge, skills and competences in paediatrics over several years of studies.

During academic year 2019/2020, the Faculty of Medicine, in cooperation with the relevant departments, medical treatment institutions and the Student Union, carried out very extensive work, both relating to organisation and content, to implement three placement rotations (surgery, internal diseases and free elective) in the programme, which take place in medical treatment institutions throughout Latvia. Placement rotations take place in university clinics, regional hospitals, outpatient facilities, family doctor’s practices. The placement rotations and documentation were built on the Clinic-based training (CBT) model successfully implemented at the faculty in the previous two years, when student groups voluntarily spent several weeks in medical treatment institutions mastering one of their study courses. Major regional hospitals were also successfully involved in this training: Daugavpils Regional Hospital, Northern Kurzeme Regional Hospital, Liepaja Regional Hospital, Vidzeme Hospital. In this way, the healthcare industry was additionally involved, doctors-clinicians shared their practical work experience and did academic work in line with StP content and requirements.

The study programme “Medicine 2.0” has two weeks of placement in a regional hospital, which is mandatory for all students. A special scholarship has been created to promote students’ motivation to have placement in regions, which is open to every student who spends the mandatory two weeks of placement in a regional hospital or outpatient practice. The scholarship is intended to cover living costs and transport. Regional medical treatment institutions additionally offer students favourable accommodation conditions.

In the context of changes in the organisation of placement, departments of the Faculty of Medicine (FM) created a student placement portfolio, which the student completes during the respective placement rotation and which reflects his/her work during placement, knowledge and skills acquired, receives a progress report on his/her work from his/her placement supervisor and provides feedback on the placement progress. When defending placement, the student submits the placement portfolio to the commission and it serves as the basis for discussion between the commission and the student and for the assessment.

During a year of studies, several meetings were held with representatives of medical treatment institutions and their managers. The Dean’s office of the Faculty of Medicine, along with the Vice-Rector for Health Studies Prof. G. Bahs, presented the concept of placement rotation and listened to recommendations. Timely information was a key prerequisite for the medical treatment institutions: when and how many students would go to placement and in what specialty. Therefore, registration for placement rotations takes place as early as possible, namely in spring several months before the beginning of placement rotations. Before registration, the Dean’s office of the Faculty of

Medicine organises several meetings with students explaining the procedures and up-to-date information for the placement.

Vertically integrated project (VIP) courses were for the first time implemented in the programme “Medicine” in academic year 2019/2020. From departments of the Faculty of Medicine, the Department of Occupational and Environmental Medicine, the Department of Biology and Microbiology and the Department of Paediatrics participated in the implementation of courses. In total, three VIP study courses were implemented: Ergonomic Workplaces in a Healthy Environment AUVMK\_052, VIP Microbiology BUMK\_063, Coeliac Disease Research Programme for Children in Latvia PEK\_047. In each VIP course, research was carried out in teams of at least 10 students.

As regards future changes, the transition to ECTS defined in the amendments to the Law on Higher Education Institutions should be mentioned, which should be introduced by 31.12.2024. While ECTS have always been counted in the programme, the new definition of credit points clarifies that the distribution of ECTS should be in full numbers. As a result, the review of the programme and the progressive switching to a proper definition ECTS within the set deadline is planned to be continued in the programme “Medicine”.

As regards the content changes in the programme, the Council of the Faculty of Medicine discusses the development of two new study courses, one of which is “Introduction to Military Medicine” (2 CP/3 ECTS). Within this course, it is expected that one week from the year 6 placement rotation should be devoted to placement at one of the military department centres in Latvia – in the medical service infrastructure. The second course with the temporary working title “Digital Medicine Action in Health Care” (2 CP/3 ECTS) is under development and its place in the StP “Medicine” will be further clarified.

**3.1.2. Analysis and assessment of the study programme compliance with the study field. Analysis of the interrelation between the code of the study programme, the degree, professional qualification/professional qualification requirements or the degree and professional qualification to be acquired, the aims, objectives, learning outcomes, and the admission requirements. Description of the duration and scope of the implementation of the study programme (including different options of the study programme implementation) and evaluation of its usefulness.**

When developing and implementing the system of courses of the study programme, a number of considerations and regulatory documents, including the Education Law, the Law on Higher Education Institutions, CM Regulations No. 268 “Regulations on the Therapeutic Expertise of Medical Personnel and Students Acquiring the First- or Second-Level Higher Professional Medical Education and the Extent of their Theoretical and Practical Knowledge”, which describe physician’s competences in the Republic of Latvia: 1) admission requirements, which are based on the regulatory enactments adopted in the Republic of Latvia, i.e. the competition of the results of centralised examinations, where the assessment obtained in secondary education in profiling subjects – chemistry or biology – is evaluated; in the case of similar assessments in entrance examinations, the results of the English language examination may be evaluated, as English is the main carrier of the world’s leading professional communication language in medicine and sources of professional cognition in medicine; 2) the content of the current programme and the logical sequence of courses to form a uniform system of study content – knowledge, skills and competences, 3) harmonisation of study course outcomes with the total StP outcome, 4) conformity

of StP results with the so-called requirements of the profession standard, the regulatory basis of which is CM Regulations No. 268, 5) the result of comparison with the content of similar study programmes of leading European universities, which makes it possible to claim that there is a harmonisation of the content of StP "Medicine" with today's most recognised study programmes in Europe.

In accordance with the Cabinet of Ministers Regulation No 322 "Regulations on the Classification of Latvian Education", the study programme code is 49721. The first part of the code, "49", refers to second-level professional higher education to be implemented after secondary education, which leads to a medical doctor's degree. The second part of the code, "721", describes the group of medical education programmes falling under the thematic area of health care. The relevance of the programme code and degree to be awarded is evident.

To reflect the mutual harmonisation of study courses, StP and the requirements for the physician's profession (standard), the result of mapping of the content is appended in Annexes 17.1, 17.2, 18.2.

In order to implement the requirements contained in those national regulations and documents, a system of mutually consistent definitions has been established: entrance criteria, StP aims, tasks, learning outcomes, education to be acquired and other.

The entry criteria are designed in such a way that programme applicants are prepared for continuation of education in the StP "Medicine", i.e. a high level of knowledge in biology and/or chemistry is required, in addition knowledge of foreign languages (mainly English) and, if necessary, knowledge of the official language is evaluated. These requirements allow for the consistent continuation of applicants' education in those sectors at higher levels, as well as the linking of them with specific study courses of StP "Medicine" such as "Human Biochemistry", "Cell Biology", "Genetics", "Clinical Genetics", "Morphology", "Human Physiology", "Histology", and in subsequent years of studies with clinical courses based on prior knowledge at the secondary school level and medical base science courses of StP.

The consistency of admission requirements, medical base sciences and clinical sciences of StP therefore constitutes a single system aimed at achieving the aim and tasks of StP.

The aim of StP "Medicine" is to create an opportunity for students, through the study content, to acquire the knowledge, skills, competences, and ethical qualities necessary for the implementation of modern health care based on the science of physician's profession for each individual and for society as a whole.

To achieve that aim, StP fulfils the tasks arising from the above-mentioned regulatory requirements, such as the physician's profession standard, as well as the consistency and common system of the admission requirements and StP courses described, and these tasks are:

- 1) to give students the opportunity to build on the education obtained at the previous level in the study of basic sciences;
- 2) to implement a consistent and systematic organisation of study courses, which includes basic sciences, pre-clinical sciences, clinical sciences and study placement (the sequence ends with the development and defence of students' research work and state examination);
- 3) to include in the study content access to knowledge, the opportunity to develop the skills and competences that are necessary to achieve the objective of the study programme and meet the requirements of physician's profession;
- 4) to ground the said knowledge, skills and competences in internationally recognised, scientifically

proven facts and findings; to enable students to develop their scientific creativity and a creative approach in their activities;

5) to serve the interests of promoting the health, combating disease and ensuring well-being of society as a whole.

The total amount of StP is 240 CP or 360 ECTS. Details of mutual compliance of courses with the total StP aim is reflected in Sub-Chapter 3.2.1. Compliance of the study system and content with national regulations and requirements is also reflected in Annexes 17.1 and 17.2. The duration and scope of the StP are equivalent for studies in Latvian and English. The scope of the StP is appropriate and meets the requirements for this type of education outlined in the laws and regulations of the Republic of Latvia (CM Regulations No. 305, CM Regulations No. 268).

These tasks of StP “Medicine” implement the aim of StP, they correspond to the aim and tasks of the study direction “Health Care” and are implemented in accordance with the requirements of EQF level 7 of education, which enable awarding of the physician’s degree at the end of the StP.

Enclosed:

Annex 24.1. Model diploma and supplement thereto.

Annex 24.8. Sample study contract.

### **3.1.3. Economic and/ or social substantiation of the study programme, analysis of graduates' employment.**

Being awarded a physician’s degree after six years long medical studies, graduates of the study programme “Medicine” can further apply for residency studies, which is an accredited professional education programme aimed at obtaining a specific physician’s specialty. General requirements to physician’s education are laid down in Section 10 of the Law On the Regulated Professions and the Recognition of Professional Qualifications.

Graduates of the RSU study programme “Medicine” start their physician’s career and continuing education in Latvia and in the EU and other countries. The RSU Alumni Association is working to obtain data on the employment of graduates of StP Medicine in Latvia or abroad, however, it should be recognised that these data are private, their provision to survey organisers cannot be mandatory and the results have only approximate accuracy. Specific employment indicators are given in this section of the Description below. It should be noted that after graduation, no more than 5-10% of graduates of StP Medicine continue their medical career development abroad, where they also find an opportunity to continue residency, focus on research or engage in other healthcare-related activities. Only individual graduates continue working abroad outside the health sector.

Further progress of graduates is confirmed by the surveys organised by RSU Alumni Association (AA), about which one can learn in the AA internet environment (for example, on [facebook.com/rsuabsolventi](https://facebook.com/rsuabsolventi)), surveys of employers organised by the State Revenue Service about employment, earnings and other indicators in different sectors; this information about graduates of care programmes, including the programme “Medicine”, is collected by the RSU Career Centre and it is analysed in the Faculty of Medicine, RSU Dean’s Council and elsewhere. The data shows that 98% of RSU graduates work within a year according to the qualifications obtained. The availability of data on StP graduates cannot be considered sufficient, but there is no doubt that the education obtained determines a person’s opportunities in the labour market and enables them to continue

their education. The Employers' Confederation of Latvia (ECL) conducted a survey on employment of RSU graduates (including graduates of the new physician programme "Medicine"). These surveys show that the employment of RSU graduates is the second highest in the country and reaches 98%. Although we do not have private data on the employment of new physicians, the observations show that the employment of this group in the sector tends to be 100%.

Graduates and teaching staff of the RSU Faculty of Medicine work with success in clinics, research institutes in Latvia and abroad and international health organisations.

According to forecasts of the Ministry of Economics<sup>[1]</sup>, labour market demand for highly qualified specialists in the thematic field of education "Health Care" will grow considerably by 2030, namely by 47%. The forecast concludes that the group of programmes "Medical treatment" expects an increase in demand at all levels of education (doctoral, Master's, bachelor's degree), and a significant shortage of specialists in the labour market is forecast at Master's and Bachelor's level. The shortage of specialists is also expected in the group of programmes "Health care services", which predicts a rapid increase in the demand for highly qualified specialists at all levels.<sup>[2]</sup>

When assessing the economic and social justification of the StP, it can be concluded that graduates of the programme are in demand and their employment is highly valued, as the deficit of specialists is also predicted.

The Council of the Faculty of Medicine is discussed, along with other matters, the need to accredit StP in the medical World Federation of Medical Education (WFME) system; students are interested in the accreditation process because, in the event of a positive accreditation opinion, individual graduates of StP Medicine could also continue their studies in the United States, Israel. At the same time, there are not many of such students in StP Medicine. The matter was also discussed in the RSU Rectorate and principled support was provided for the accreditation of StP Medicine also in the WFME system. The work has started.

Graduates of StP Medicine find jobs and are demanded as industry specialists also in state and local government institutions, the Ministry of Health, the Ministry of Education and Science, the Centre for Disease Prevention and Control, other institutions, organisations established by the state and local governments, etc.

Private, in particular outpatient medical institutions also provide an important source of employment: VC-4, Veselības centru apvienība, E. Gulbja laboratorija, Centrālā laboratorija, etc. Since these institutions are important participants in the general Latvian public health care system, graduates of StP Medicine are an important and appreciated part of it.

<sup>[1]</sup> Informative Report on medium and long-term forecasts of the labour market, Ministry of Economics of the Republic of Latvia, 2018

<sup>[2]</sup> Dynamic University. (2020). Investigation of the competitiveness of Rīga Stradiņš University and RSU Red Cross Medical College Study Programmes and Compliance with Medium- and Long-Term Development Trends of the Labour Market and Industry.

#### **3.1.4. Statistical data on the students of the respective study programme, the dynamics of the number of the students, and the factors affecting the changes to the number of the students. The analysis shall be broken down into different study forms, types, and languages.**

All state budget funding and full fee places are filled in Medicine. In recent years, the number of applicants to the Medicine programme has increased, with 6 applicants competing for 1 study place.

In the academic year 2022/2023 there were 1294 students studying in Latvian and 2368 students studying in English. The number of students studying in English has been gradually and steadily increasing since the academic year 2016/2017, while the number of students studying in Latvian has been steady with slight fluctuations. The number of students is highest in the first years of study, decreasing in the later years in both languages of study. In the academic year 2022/2023, the number of students enrolled in English was higher, which is why the total number of newly enrolled students was also higher compared to the academic year 2016/2017, namely 494 students in the academic year 2016/2017 and 627 students in the academic year 2022/2023. The increase in the number of students enrolled in the English language programme is also accompanied by an increase in the number of students enrolled in year 6, with 88 students in year 6 during the 2016/2017 academic year and 245 students during the 2022/2023 academic year, with a corresponding increase in the number of graduates from the English language programme.

The RSU strategy as a whole, including the StP Medicine Development Plan, provide for a number of criteria that are taken into account when planning the number of students in the StP: 1) the need to guarantee the quality of the study process and to maintain the ratio of students and lecturers at least 10-12 / 1; 2) the availability and quality of infrastructure, which must be in conformity with both the laws and regulations of Latvia and the requirements of ethics and work aesthetics nowadays, 3) the dynamics of the number of students is significantly influenced by the attitude of medical treatment institutions of Latvia, especially university hospitals, to the presence of students in hospital premises – clinic departments, examination rooms, common infrastructure premises (special restrictions and even total ban of students from medical treatment institutions during the COVID-19 pandemic); 4) actual conditions in medical treatment institutions, for example, the Riga East Clinical University Hospital (RECUH) and P. Stradins Clinical University Hospital are being renovated – reconstruction, overhaul or even new construction is performed, which significantly affects the number, availability and technical condition of study rooms.

Because of these factors, StP “Medicine” cannot make a significant increase in the number of students, but would like to guarantee the gradual development of the number of programme participants by working in parallel to mitigate the impact of these factors. For example, the Faculty of Medicine discusses the creation of a lecturer assistant position, which will help a significant number of students maintain the presence of studies also under conditions of a constant number of lecturers, as well as offer slightly more study places for applicants of StP “Medicine”. Another example: RSU is modernising and overhauling the study premises rented by RECUH; during this period, the RSU has deployed four mobile modules which fully comply with the requirements for the provision of the study process (room area, temperature, electrical and electronic infrastructure, availability of internet). This allows the study work in the largest hospital in Latvia to continue without delay also during its reconstruction.

The conditions described above also affect the dynamics of the number of students; there has been a slight increase in the number of students studying for their own funds since the previous reaccreditation, as reflected in Annex 16.

These dynamics are most influenced by clinical study conditions, which are influenced by the policy of medical treatment institutions in relation to the implementation of educational processes in hospitals. It should be noted that several regional hospitals implement policies different from

university hospitals and maximise support for the presence of students in the clinical environment of regional hospitals. StP “Medicine” tries to use it effectively for the implementation of its functions defined by the state – education of medical practitioners in hospital environment and placements. Each year, students of year 6 go to Latvian regional hospitals to perform placement rotations – thus strengthening skills prior to the national degree examination, establishing potential employment relationships in the future, choosing residency specialties. In this way, Latvian regional hospitals improve their personnel policy by addressing and attracting potential new physicians already during their studies. The function of enrichment of the health care system required by Latvia is also fulfilled.

The ERASMUS+ mobility system also plays an important role in the overall internationalisation of RSU, including international enrichment of StP Medicine; each year up to 20 students go on exchange trips to ERASMUS + universities, and students from many countries – Czechia, Portugal, Italy, Poland, etc. – come to RSU. The Faculty of Medicine, together with the International Department, are working to organise and successfully ensure a study process that enriches international experience of StP Medicine, provides programme students with unique international experience, positions RSU as a university of the open-type international academic value system.

Enclosed:

Annex 16. Statistical Data on Students.

### **3.1.5. Substantiation of the development of the joint study programme and description and evaluation of the choice of partner universities, including information on the development and implementation of the joint study programme (if applicable).**

Not applicable.

## **3.2. The Content of Studies and Implementation Thereof**

### **3.2.1. Analysis of the content of the study programme. Assessment of the interrelation between the information included in the study courses/ modules, the intended learning outcomes, the set aims and other indicators with the aims of the study course/ module and the aims and intended outcomes of the study programme. Assessment of the relevance of the content of the study courses/ modules and compliance with the needs of the relevant industry, labour market and with the trends in science on how and whether the content of the study courses/ modules is updated in line with the development trends of the relevant industry, labour market, and science.**

The content of studies in StP “Medicine” is designed in such a way that there is clearly a consistent and systematic correlation between the content of each seminar, lecture, placement or examination, on the one hand, and a) the aim of the course, b) the aims and tasks of the programme, c) the requirements of the profession standard, on the other hand. The director of the programme, together with colleagues from the Faculty of Medicine and the Centre for Educational



Growth (CEG), has compiled a list of programme courses in a way that meets the requirements of the physician's profession standard. These requirements are also presented to the heads of the courses concerned who have adapted the content of their courses to the requirements of the standard. Heads of courses are also responsible for the fulfilment of the curriculum and content of courses, which are subordinate to the aim of the particular course, as well as in general to the aim of the StP and the physician's profession standard. Course lecturers are experts in their field with top-level professional qualifications and knowledge of the latest scientific trends. Before the beginning of each academic year, the content and information of the courses is updated to reflect the latest scientific trends, with reference to the most recent scientific literature (Annex 23.2).

To develop and maintain such a coordinated system consistently, StP was subjected to multiple mappings, during which the conformity of individual courses and their content with the aim of StP and the profession standard was established and analysed. When discrepancies were detected, the StP plan was adjusted to avoid, for example, lack of individual topics or an unjustified repetition of individual topics.

It should be emphasised that the requirements of the profession standard are the result of a collective effort under the management of the Ministry of Health involving many industry organisations and institutions: Latvian Medical Association, Latvian Junior Doctors Association, representatives of clinical university hospitals, representatives of Latvian hospital society, representatives of RSU and University of Latvia, etc. It can therefore be argued that the profession standard reflects the modern requirements imposed by the healthcare industry, employers and the practical working environment on physician's education. So the requirements of StP "Medicine" are rooted in industry requirements and needs, fulfil them, and new physicians are prepared to meet the needs of the practical working environment.

More detailed and extended mapping results are reflected in Annexes 17.1, 17.2, 18.1, 18.2.

Enclosed:

Annex 17.1. Compliance of the Study Programme With the National Educational Standard.

Annex 17.2. Compliance of the Study Programme With the Industry-Specific Regulations.

Annex 18.1. Mapping of the Study Courses for the Achievement of Learning Outcomes of the Study Programme.

Annex 18.2. Compliance of the Qualification to Be Acquired Upon Completion of the Study Programme With the Professional Standard.

Annex 19. Planning of the study programme (for each type and form of the implementation of the study programme).

Annex 20. Description of Study Courses.

Annex 23.2. Evaluation of the Information and Methodological Base of the Library Resources for the Implementation of the FACULTY OF MEDICINE Study Programmes in Accordance with the Requirements of the Guidelines.

**3.2.2. In the case of master's and doctoral study programmes, specify and provide the justification as to whether the degrees are awarded in view of the developments and findings in the field of science or artistic creation. In the case of a doctoral study programme, provide a description of the main research roadmaps and the impact of the study programme on research and other education levels (if applicable).**

The content of StP courses reflects recent trends and needs in healthcare and in particular in the medical treatment sector. A system is in place to ensure that content is up-to-date and consistent with modern scientific knowledge:

- 1) most heads departments and heads of courses of the Faculty of Medicine (leading implementer of StP, Faculty of Medicine) are leading experts of professional associations of physicians and other specialists, experts of the Latvian Academy of Sciences, many are members of the Latvian Academy of Sciences, authors of books, monographs, lecturers of international significance, members of organisational committees of international scientific conferences, members of international professional associations or experts elected to managerial positions;
- 2) the content of StP is organised in the form of compulsory courses (A courses) and compulsory elective courses (B courses). B courses provide an additional and in-depth study of the latest findings in relevant sectors for interested students to deepen their knowledge in a targeted way;
- 3) students studying in StP “Medicine” may take the national degree examination only if before that they write and defend their research paper, which should be based on the ability of each student to demonstrate creative and research abilities;
- 3) the StP is discussed in the Council of the Faculty of Medicine, which is attended by leading professors of the Faculty of Medicine, scientists, representatives of industry, i.e. modern health sector, promoting the inclusion of the most recent developments in the StP;
- 4) the institution and linking of visiting professors to structural units of the Faculty of Health is developing rapidly, which introduces the latest international knowledge and scientific findings as well as the experience of many leading scientific universities in the world (see Annex 8.2: Statistics on international students and lecturers);
- 5) a new study course “Introduction to Research” is planned in the 2<sup>nd</sup> year of studies, which, when RSU becomes a university of science, will reflect intensification of the scientific approach and the principle “study through research”;
- 6) the RSU’s existing internal research grant system supports active activities of students, lecturers and researchers of StP “Medicine” in priority fields of science: oncology, children’s health, infectious diseases, etc.;
- 7) Annex 7 “Model Diploma” to Regulations of the Cabinet of Ministers No. 202 of 16 April 2013 “Procedure for Issuing State-Recognized Documents Certifying Higher Education”, describing the Latvian higher education system, emphasises in particular: “.. *A Master’s degree shall also be equal to the degrees in medicine, .. professional studies (studies in year 5 and year 6)..*”. This special provision grants an exclusive status to the programmes of a physician, dentist and pharmacist – both a professional qualification and a degree (equivalent to a Master’s degree) are granted at the same time;
- 8) when evaluating the research and overall performance of RSU in accordance with the typology of higher education institutions of Latvia determined by the Law on Higher Education Institutions (information in [Latvian](#), [English](#)), RSU has acquired the status of a University of Science; StP “Medicine” is the largest study programme whose contribution to the overall performance of the RSU is crucial, so it is an argument for defining role of the achievements in the field of science in the functioning of the StP.

**3.2.3. Assessment of the study programme including the study course/ module implementation methods by indicating what the methods are, and how they contribute to the achievement of the learning outcomes of the study courses and the aims of the study programme. In the case of a joint study programme, or in case the study programme is implemented in a foreign language or in the form of distance learning, describe in detail the methods used to deliver such a study programme. Provide an explanation of how the student-centred principles are taken into account in the implementation of the study process.**

The practical implementation of the study programme takes place in academic structural units of the Faculty of Medicine. The Department of Clinical Skills and Medical Technologies joined the Faculty of Medicine, and is the 21<sup>st</sup> academic structural units subordinated to the Faculty of Medicine.

Academic structural units of the Faculty of Medicine (information in [Latvian](#), [English](#)):

1. Department of Anaesthesiology and Intensive Care.
2. Department of Occupational and Environmental Medicine.
3. Department of Paediatric Surgery.
4. Department of Biology and Microbiology.
5. Department of Human Physiology and Biochemistry.
6. Department of Dermatology.
7. Department of Obstetrics and Gynaecology.
8. Department of Physics.
9. Department of Family Medicine.
10. Department of Internal Diseases.
11. Department of Infectology.
12. Department of Clinical Skills and Medical Technologies.
13. Department of Surgery.
14. Department of Morphology.
15. Department of Neurology and Neurosurgery.
16. Department of Ophthalmology.
17. Department of Orthopaedics.
18. Department of Otorhinolaryngology.
19. Department of Pathology.
20. Department of Paediatrics.
21. Department of Psychiatry and Narcology.
22. Department of Psychosomatic Medicine and Psychotherapy
23. Department of Radiology.
24. Statistical Unit.

The study work in these is organised in the form of lectures, seminars and laboratory works. A certain amount of studies is intended as student's independent work, a student's research paper is prepared, which is an independent research under guidance of a lecturer of any academic structural unit of the Faculty of Medicine. Clinical care placement (in the 5<sup>th</sup> year of studies) and clinical rotation placement (in the 6<sup>th</sup> year of studies) are taken outside the higher education institution. When starting the implementation of each study course (not later than 10 days before the beginning of the semester), lecturers of the academic structural unit familiarise students with the content of the study course programme and the list of readings necessary for its mastering,

works to be performed during the semester and requirements for passing a class test, the form and type of tests of knowledge and skills, as well as methods for evaluation of knowledge and skills. Contact details of all office employees of departments are provided and proposed to be contacted for support in case of any unclarity. The Council of the Faculty of Medicine and the whole faculty are reminded of the need to ask to provide feedback by completing surveys after the end of each course. RSU is progressing towards *consensus* decisions between students and academic units on mandatory completion of surveys by students.

Academic personnel constantly help students to facilitate success of students and the achievement of efficient outcomes of the study programme within the intended time. Forms of assistance to students are: consultations during the study semester, before provisional outcomes tests (colloquia), exams and before the national degree examination. There are regular contacts in the e-learning environment.

The criteria and the system of assessment of knowledge of students are described in the Academic Regulations I approved by the RSU Senate. Academic Regulations I are reviewed on a regular basis in a working group led by the Vice-Rector for Studies with participation of students. The latest trends in the study process, which match recommendations for higher education in Europe and world are integrated in the requirements of the regulations and forwarded for approval at the RSU Senate. The general overview of the assessment system in the Academic Regulations accurately corresponds to Regulations of the Cabinet of Ministers on second level professional higher education. Colloquia, practical work tests, theoretical tests, exams and cumulative exams are organised to check and assess students' knowledge in the study programme "Medicine". Learning outcomes and provisional outcomes are assessed using two indicators: qualitative and quantitative. A qualitative assessment is conducted using 10-grade scale criteria, where 10 (with distinction) is the highest grade, but 4 (almost satisfactory) is the lowest successful grade. The quantitative indicator is the amount of the study course in CP / ECTS. Exams, research projects, colloquia, and test works are assessed with a grade.

#### **Learning outcomes assessment system.**

<b>Level of mastering</b>	<b>Grade</b>	<b>Explanation</b>	<b>Assessment</b>
Very high	10	With distinction	Positive assessment
	9	Excellent	
High	8	Very good	
	7	Good	
Average	6	Almost good	
	5	Average	
	4	Almost satisfactory	
Low	3	Weak	Negative assessment

Different forms of tests are used during examinations and tests:

- written, formulating an answer in the form of text;
- written – with a choice of answers;

- oral;
- combined form – written and oral;
- using a computer;
- organising the so-called objective structured clinical examination (OSCE);
- in the form of a cumulative exam, which is a form of test, where student's knowledge, skills and abilities are assessed based on his/her results during the year of studies, semester.

To determine the amount of original content in students' final papers, all the final papers of students should be submitted electronically to e-learning, to the Turnitin system. RSU has a tool, Turnitin, which helps lecturers to check the originality of content of written papers of students and facilitates the correction. The most important advantage of this tool is the possibility to compare the content of the submitted paper with the information published in the database and internet resources. It is not less important that student papers can be submitted to Turnitin electronically and corrected.

Studies in the second level professional study programme "Medicine" complete with a national degree examination in "Clinical Medicine". The national degree examination consists of three parts

- an interpretation of a patient (in a clinic);
- a theoretical test;
- skills in conducting a manipulation (in the centre of medical technologies).

The organisation and resources of studies during the initial period of COVID-19 infection and during the pandemic should be specifically described.

In spring 2020, a significant increase in the incidence rate of COVID-19 was detected and the Ministry of Education and Science of the Republic of Latvia urged higher education institutions to switch to remote studies. The first remote lectures were implemented on the next day following this appeal to prevent students from gathering in auditoriums, and more than 200 video lectures were recorded in the next two weeks using the technological tool *Panopto*. At this time, a significant number of departments moved their work to the *online* environment using tools such as *Panopto*, *Zoom* and *Microsoft Teams*. At the same time, in some clinical courses, on-site studies were maintained to ensure the acquisition of practical skills in StP "Medicine". An order was issued by the RSU Rector to implement studies in a way that prevents students from gathering during theoretical training, yet maintaining practical training in clinical courses.

It should be noted that the implementation of clinical courses depends on cooperation with medical treatment institutions, decision of cooperation partners – hospitals – regarding admission or non-admission of student to the clinical department environment (patients and their data).

During the pandemic, medical treatment institutions and also major partners – Riga university hospitals, informed RSU about a total ban on students coming to hospitals and implementing their study content in clinics. Those restrictions continued in both 2020 and 2021 and partly also in 2022. In those circumstances, however, StP "Medicine" continued to work without interruption and precisely according to the planning of the content of the studies, using remote study opportunities. There were no breaks in the curriculum, not even for a day! The Medical Education Technology Centre (METC) has made a significant contribution, its staff prepared packages with materials to be used in simulations and sent to students to their places of residence (including abroad), which made it possible to largely compensate for the lack of regular studies, especially in study courses such as "Surgery", "Gynaecology and Obstetrics", "Basics of Family Medicine", etc. Students did practical manipulation training on models, recorded it on video and sent to lecturers for evaluation. This was unexperienced, but modern and flexible approach to providing study content and guaranteeing quality at a potentially high level also during the pandemic and total restrictions

(there was an emergency condition in the Republic of Latvia in 2021 – 2022).

These examples show that StP “Medicine” did not stop implementing its study content even during the peak of COVID – it happened according to planning. As the COVID-19 pandemic restrictions eased, both the best experience of remote studies (around 20%) and resumed regular studies (around 80%) have been preserved.

During remote studies, the management of the Faculty of Medicine paid special attention to the full and continuous conduct of the study process by holding regular meetings with students, departments and lecturers. The Dean of the Faculty of Medicine and the Vice-Dean met individually with the senior student of each course, who reported the current situation in the study process – both difficulties and positive examples. Together with the heads of departments and courses, the shortcomings were urgently addressed to make the remote learning process easier and more comprehensible for students. The Dean's Office of the Faculty held meetings with the heads of the student groups and with other students to receive feedback on the study process and possible improvements. The Faculty of Medicine ensured prompt communication and answers to students' questions. The Council of the Faculty of Medicine is composed of 4 student representatives from different years of study, who participate equally in the development of the study programme, e.g., by approving the programme plan.

When the energy crisis began and the Cabinet of Ministers of the Republic of Latvia decided on mandatory energy savings in all state institutions at 15%, StP uses the experience developed during COVID-19, which allows continuous implementation of StP content according to its academic plan and wider use of remote study opportunities. It should be noted that during the energy crisis there is a possibility to implement the content of clinical courses in medical treatment institutions and the impact of the crisis on the course of studies is relatively smaller.

**3.2.4. If the study programme envisages an internship, describe the internship opportunities offered to students, provision and work organization, including whether the higher education institution/ college helps students to find an internship place. If the study programme is implemented in a foreign language, provide information on how internship opportunities are provided in a foreign language, including for foreign students. To provide analysis and evaluation of the connection of the tasks set for students during the internship included in the study programme with the learning outcomes of the study programme (if applicable).**

In the 6<sup>th</sup> year of the undergraduate study process, students implement a year of clinical practical studies, during which for 17 weeks (6 weeks of internal disease profiles, 6 weeks of surgical disease profiles and 5 weeks of free choice in any of the proposed treatment profiles) they go to outpatient and inpatient medical treatment institutions, as well as general practitioners' practices throughout the country (around 150 agreements).

The Faculty of Medicine, in cooperation with the Ministry of Defence of the Republic of Latvia, intends to open the course “Basics of Military Medicine”. This reflects the need of the Latvian state to strengthen its security and future competence in matters related to this field.

During the placement rotation the student acts, taking into account his/her professional knowledge and skills, which were obtained and evaluated during studies until now. The student assists and provides support to the medical doctor – the placement rotation supervisor in follow-up of patients,

performance of practical manipulations, filling medical documentation and other activities. During placement, the student implements the clinical part of his/her learning process by integrating into a real medical treatment work process, environment and team to learn to use the acquired theoretical knowledge in clinical placement.

Each student works (studies during placement) individually under supervision of a placement supervisor (certified physician). During placement, the student and the placement supervisor are guided by the developed placement rotation description for the specific profile, which determines the scope of the competences and manipulations to be performed, and each day he/she fulfils the placement portfolio, in which he/she describes the work performed, the portfolio assessment is also be provided by the placement supervisor.

The RSU Faculty of Medicine, in cooperation with medical treatment institutions, actively identifies placement sites and provides all 5<sup>th</sup> year students with application opportunities in spring of each year to the placement sites offered by medical treatment institutions for the next year of studies with the help of a specially developed application tool on the internet platform. Condition – each student must spend at least two weeks in placement in a family doctor's practice and spend at least two weeks in a medical treatment institution outside Riga. A scholarship of 12 euro per calendar day is paid for this time spent in the region. At the same time, medical treatment institutions are also trying to provide students with as friendly residency offers in the region as possible. For time spent in placement, RSU collects feedback and assessments from both students and placement supervisors.

Figures 1 and 2 below show the fragments of the survey on placement in year 6 of StP "Medicine" (in the period prior to the state examinations) which reflect the self-assessment of students' knowledge, skills and competences. The results of that survey reflect the aggregate benefit and ability to work in a sector acquired over six years of studies and reflect the practical value of StP. It demonstrates both the strengths of StP and the need to implement placement to improve manual and other professional skills. In particular, it should be stressed that the survey was carried out during the COVID-19 pandemic, when the acquisition of practical skills was extremely difficult and could be compensated by the implementation of these placements in medical treatment institutions.

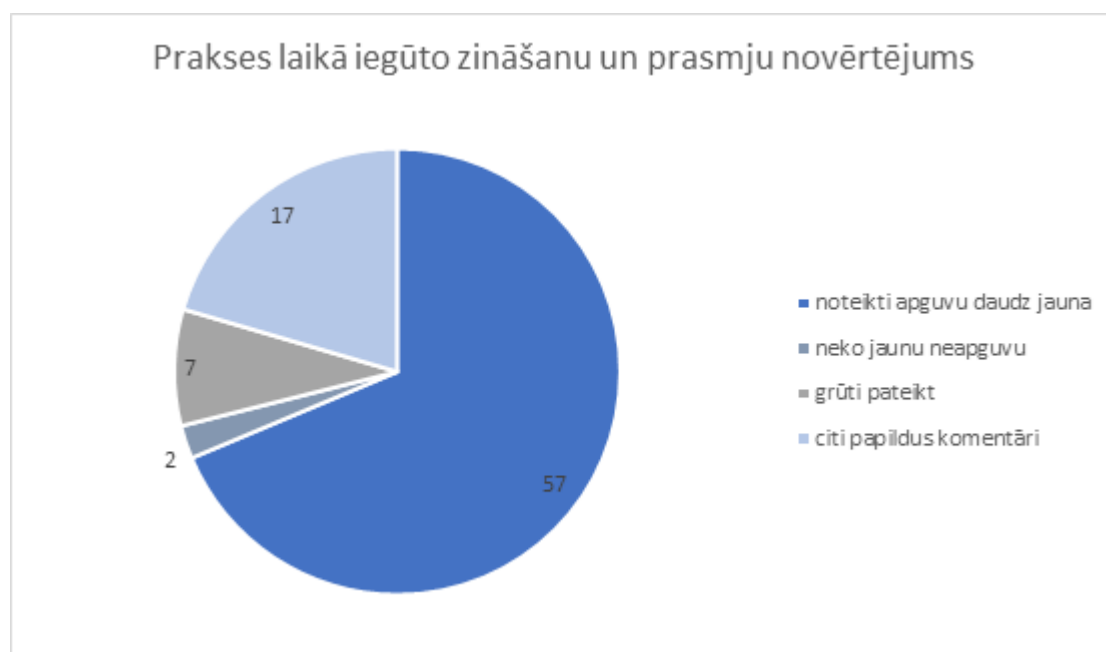


Figure 1. Year 6 placement survey results: assessment by students I

This table shows that most students of the 6th year welcome and appreciate rotation placement as an opportunity both to strengthen existing skills, acquire new competences, develop their competences acquired during studies. The quality of placement depends to a large extent on the choice of the placement site and the success of communication with clinical colleagues in medical treatment institutions.

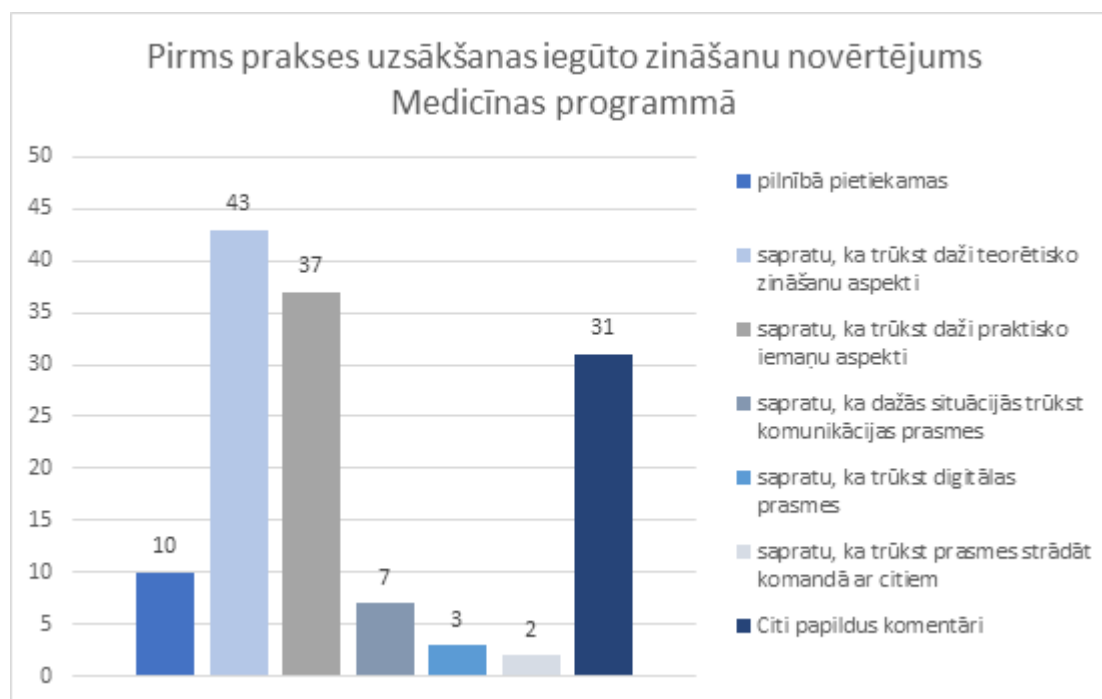


Figure 2. Year 6 placement survey results: assessment by students II

Table data show the theoretical knowledge acquired during studies is crucial to the overall competence of the prospective physician, that year 6 rotation placements are an important support and a necessary tool for shaping the overall competence of the new physician.

Within the study course "Basics of Family Medicine", fifth year students of the Faculty of Medicine undergo a one-week placement in a general practitioners' practice in order to acquire and improve their practical skills, communication skills, and knowledge of the principles of organising general practitioners' practice, as well as to reinforce the theoretical knowledge acquired in the study course.

A total of 145 agreements have been concluded by RSU for the provision of clinical placement, of which 33 are in hospitals and outpatient centres and 112 in a family doctor's practice, depending on the size of each medical treatment institution, providing placement for 17 weeks of clinical placement for all 6<sup>th</sup> year students of the Faculty of Medicine at the same time, and their number of around 200 each year.

International students also implement the clinical placement year of studies, during which for 17 weeks based on the unified structure in the programme they go to outpatient and inpatient medical treatment institutions, as well as family doctor's practices in students' home countries, RSU cooperation clinics abroad and Latvia. Approximately ~ 20% of students remain in Latvia (in whole or in part) each semester (autumn and winter admission). There are an average of 135 students from abroad each semester.

RSU provides international students with the opportunity: 1) to find a placement site in his/her home country, 2) to go to RSU cooperation clinics abroad or 3) to implement placement in Latvia.

RSU, in cooperation with medical treatment institutions, in Latvia and abroad actively identifies



placement sites and provides all 5<sup>th</sup> year students with application opportunities for one to two semesters before the beginning of placement, when the student may apply to the placement sites offered by medical treatment institutions. If those are RSU cooperation institutions, then RSU tries to plan placement in accordance with preferable profiles of students and opportunities provided by institutions. Condition – if a student find a placement site individually, a scholarship of 40 euro is paid for one week spent in placement. In this way, RSU is trying to stimulate the initiative of students to find a potential job in the future and to reduce the workload of administrative staff of the university to organise placement.

In the spring semester of 2022, 132 international students of semester 11 had placement:

- 1) in Latvian hospitals – 24 international students;
- 2) abroad – 108 students.

In the autumn semester of 2022, 133 international students of semester 11 had placement:

- 1) in Latvian hospitals – 28 international students;
- 2) abroad – 105 students.

A total of 118 foreign clinics/institutions in the following countries, including RSU cooperation hospitals in Germany, Austria, Finland, Sweden, Norway, Italy, Israel, Portugal, United Kingdom, Spain, Netherlands, Malta, Switzerland, Liechtenstein, United States, New Zealand, Tanzania, South Africa, India.

RSU works with the responsible officials of the Ministry of Health of the Republic of Latvia to demonstrate the potential and capacity of 6<sup>th</sup> year students of the programme “Medicine” in the health care system in circumstances when the Ministry of Health itself points to acute shortages of healthcare and medical staff in Latvia, especially in the regions of the country. RSU as a whole and the Faculty of Medicine as the main implementer of StP “Medicine” have proposed to introduce a new profession standard for the profession of medical trainee in Latvia. 6<sup>th</sup> year students of StP “Medicine” could apply for this position, performing their rotation placement and at the same time performing the duties specified by the head of the medical treatment institution under the supervision of a medical practitioner certified within the scope of his/her competence. The initiative is supported by students themselves and has precedents in European Union countries such as Austria, Germany and elsewhere.

Timely placement in the 6<sup>th</sup> year of studies has several important advantages:

1. Students strengthen theoretically acquired knowledge by acquiring practical skills in a real-life situation in a functioning healthcare system.
2. Students test their perception of future specialisation and choice of specialisation during their residency, building rational and responsible decisions about their careers in medicine.
3. Students get to know specific employers and show themselves as a potential worker, as well as the strengths or weaknesses of StP “Medicine,” making it possible to get feedback from employers about the programme and improve it, if necessary.
4. Students can provide essential assistance in ensuring health care personnel policies during 17 weeks of placement, as demonstrated by the COVID-19 pandemic period, when about 1,200 RSU students (including 6<sup>th</sup> year students of StP “Medicine”) worked at various health institutions to prevent the national emergency.
5. International students can implement the above-mentioned in their home countries in full.

Enclosed:

**3.2.5. Evaluation and description of the promotion opportunities and the promotion process provided to the students of the doctoral study programme (if applicable).**

Not applicable.

**3.2.6. Analysis and assessment of the topics of the final theses of the students, their relevance in the respective field, including the labour market, and the marks of the final theses.**

The topics of students' research papers are a reflection of RSU's priorities as a science university in the study process and are part of the overall science policy. Research topics, which have also been recognised both internationally and within RSU, are considered as priority in the StP "Medicine": oncology, cardiovascular diseases, childhood diseases, infectious diseases, mental diseases, trauma, pharmacy. These sectors are crucial in organising the composition of research staff, building local RSU infrastructure and developing cooperation networks with international partners, participating in Latvian and international scientific projects. Researchers of RSU as a whole and of StP develop topics of student research papers that are able to reflect and develop the topics of said science sectors enabling students to contribute to the overall process of research in both StP "Medicine" and research in RSU as a whole.

Furthermore, it should also be noted that each RSU department implementing StP "Medicine" has to offer topics of student research papers for the development of research paper. The interests of students in medicine as a whole and in research vary enormously, so each department formulates research topics in its field, which are coordinated with the Faculty of Medicine and then offered to students for the development of research papers. In all cases, research papers are written under the supervision of paper supervisors, further reviewed and presented (defended) to the commission of department lecturers and researchers. The assessment of student research work is in line with the assessment provided for in the Academic Regulations I (10-point system) and is reflected in the graduate's diploma. It is impossible to take the national degree examination without defending the paper.

Detailed topics are reflected in Annex 22: Topics of research papers of students in the second level professional higher education study programme "Medicine".

### **3.3. Resources and Provision of the Study Programme**

**3.3.1. Assessment of the compliance of the resources and provision (study provision, scientific support (if applicable), informative provision (including libraries), material and technical provision, and financial provision) with the conditions for the implementation of**

**the study programme and the learning outcomes to be achieved by providing the respective examples.**

The implementation of the study programme “**Medicine**” (information in [Latvian](#), [English](#)) is ensured by the **Faculty of Medicine** (information in [Latvian](#), [English](#)), which coordinates the work of departments (information in [Latvian](#), [English](#)). Departments of the Faculty of Medicine coordinate student training in all clinical and theoretical disciplines of medicine. In cooperation with higher education institutions and scientific institutes of other countries, departments of the faculty have become scientific schools and research centres, which ensure professional quality of teaching staff of RSU.

The study process also includes **placement** in clinical care of patients, internal diseases, surgery, obstetrics and gynaecology, complementing theoretical knowledge with practical skills. The **simulation**-based medical education approach is implemented at the Medical Education Technology Centre (METC) (information in [Latvian](#), [English](#)) in Riga, at Anņņmuižas bulvāris 26a, using multi-level state-of-the-art simulations to improve practical skills in both individual and team scenarios. For the first time in history, a simulated operating unit has been opened in METC premises that includes a complete simulation of operational infrastructure in a state-of-the-art hospital and where simulation scenarios can be played out by students from many sectors, including students of StP “Medicine”. Products of the cooperation partner “Exonicus” – 3D virtual reality applications – are gradually being introduced, for example, for the introduction of the Military Medicine course in StP “Medicine”.

The studies take place in appropriate lecture and classrooms, laboratories, hospital departments and study centres. During studies, free access to study e-resources such as e-books, videos, scientific databases and other world-class e-resources is ensured.<sup>[1]</sup> It is possible to use the RSU library of national importance with a unique range of medical literature for Latvia for study needs.

The Rīga Stradiņš University METC is the only simulation centre in Latvia and the largest in the Baltic States, with the right infrastructure and equipment in one place to ensure acquisition and improvement of skills, as well as implementation of simulation programmes in various healthcare sectors.

Starting with the fourth semester, classes are held in improved rooms for theoretical and practical classes in the largest Riga hospitals: Riga East Clinical University Hospital, P. Stradins Clinical University Hospital, Children’s Clinical University Hospital, Hospital of Traumatology and Orthopaedics, Riga Maternity Hospital and elsewhere.

Part of students spend one year of studies in European Union countries within the Erasmus + programme. Some study courses can be completed in leading foreign hospitals at the choice of the students themselves, as described in the previous section. Many Latvian students also voluntarily choose to continue their study work in international groups.

Enclosed:

Annex 23.1. Assessment of the informative and methodological provision regarding library resources for the implementation of the study direction “Health Care” in accordance with the requirements of the guidelines

Annex 23.2. Evaluation of the Informative and Methodological Base on IT Infrastructure and Resources Available.

[1] A description of the library resources can be found in section 2.3.3 of the direction description: *System and procedures for improvement and acquisition of methodological and informative provision*, detailed information on infrastructure and material and technical provision is available in the Annex No. 23.1 "Assessment of the information and methodological base of the Library resources for the implementation of the study direction "Health Care" in accordance with the requirements of the guidelines". A description of IT resources can be found in the description of the study direction in point 2.3.2: *Information on the infrastructure necessary for the implementation of the study direction and corresponding study programmes for ensuring the study process at RSU and also detailed information on infrastructure and material and technical provision is available in the Annex 23.2 "Assessment of the Information and Methodological Base for IT Infrastructure and Available Resources"*.

**3.3.2. Assessment of the study provision and scientific base support, including the resources provided within the framework of cooperation with other science institutes and higher education institutions (applicable to doctoral study programmes) (if applicable).**

Not applicable.

**3.3.3. Indicate data on the available funding for the corresponding study programme, its funding sources and their use for the development of the study programme. Provide information on the costs per one student within this study programme, indicating the items included in the cost calculation and the percentage distribution of funding between the specified items. The minimum number of students in the study programme in order to ensure the profitability of the study programme (indicating separately the information on each language, type and form of the study programme implementation).**

The StP is planned to be financed from state budget funds and the funds of individuals and legal entities setting the tuition fee in the Latvian-taught programme in accordance with the state budget funding without social security of EUR 5705, in the English-taught programme- EUR 12500 per year of studies. The tuition fee can be subject to discounts in accordance with internal norms and regulations. The number of students planned to be achieved in the Latvian-taught programme in six years of studies is 1236 students, enrolling 211 students in the first year of studies and planning drop-outs of 1-5 students per year in the following years. The number of students planned to be achieved in the English-taught programme in six years of studies is 2251 students, enrolling 591 students in the first year, planning a drop in the number of students to 511 in the second year of studies, to 307 in the third year of studies, remaining unchanged in the fourth year, reducing to 295 in the fifth year, and to 240 in the sixth year. Such a number of students is optimal to ensure a high-quality study process and to make the study programme cover its implementation, as well as development costs.

There are 200 state-funded study places in the Latvian-taught programme. The state funding per budget place is set at EUR 6377 per academic year as of 1 September 2023. Fee-paying students are also admitted to the StP. The minimum number of students at the beginning of the academic year to start the programme would be 200. The programme currently has 1198 students. As the

demand for places in the StP is very high (6.83 applicants per place in the 2023 application period), there is no reason to believe that it would be a problem to recruit the required number of students in the future.

In the English-taught programme, due to significant demand, tuition fees are set on the basis of market research. The tuition fee is €12500 per year, while the StP expenditure is €7268. The cost-effectiveness of the English StP would be achieved with a lower number of students than the Latvian StP. The total number of students in the programme is 2349. The surplus of StP revenue is invested in university development activities.

The funding is used for staff remuneration, attraction of visiting assistant professors, taxes, maintenance of IT infrastructure, purchase of equipment and devices, and study visit costs. In addition to the direct costs of implementation of lectures and classes, the StP must cover infrastructure maintenance costs (facilities, IT solutions) and other RSU common resources used in the StP (Student Services, Library, organisation of the study process, grant for the Student Union and other support and administrative functions).

StP is implemented by RSU Faculty of Medicine Department of Psychosomatic Medicine and Psychotherapy, Statistical Unit, Department of Biology and Microbiology, Institute of Anatomy and Anthropology Department of Morphology, Department of Pathology, Department of Anaesthesiology and Intensive Care, Department of Occupational and Environmental Medicine, Department of Human Physiology and Biochemistry, Department of Physics, Department of Internal Diseases, Department of Otorhinolaryngology, Department of Paediatrics, Department of Infectology, Department of Dermatology and Venereology, Department of Paediatric Surgery, Department of Obstetrics and Gynaecology, Department of Family Medicine, Department of Surgery, Department of Neurology and Neurosurgery, Department of Ophthalmology, Department of Orthopaedics, Department of Psychiatry and Narcology, Department of Radiology, Dean's office of the Faculty of Medicine, Department of Clinical Skills and Medical Technologies, Faculty of Public Health and Welfare Department of Sports and Nutrition, Department of Nursing and Obstetric Care, Department of Public Health and Epidemiology and Department of Health Psychology and Pedagogy, Faculty of Pharmacy Department of Pharmacology, Faculty of Dentistry Department of Oral and Maxillofacial Surgery, Department of Humanities, Faculty of Rehabilitation Department of Rehabilitation, Institute of the History of Medicine, Department of Humanities and Language Centre. Remuneration of the academic staff in the first year of the Latvian-taught StP is planned to be approximately 585 thousand EUR and approximately 1908 thousand EUR in the English-taught study programme.

Table 2. **Information on student costs**

**Costs of the Latvian-taught study programme**

<b>Name</b>	<b>Result with the existing tuition fee</b>
Average income per student, EUR	5,990
Average cost per student, EUR	5,531
Academic staff, %	50
Department resources, %	4

Other direct expenditure, %	4
Scholarships, %	6
Fixed costs, %	6
Overheads, %	30

#### **Costs of the English-study programme**

<b>Name</b>	<b>Result with the existing tuition fee</b>
Average income per student, EUR	11,514
Average cost per student, EUR	7,268
Academic staff, %	44
Department resources, %	3
Other direct expenditure, %	1
Scholarships, %	1
Fixed costs, %	4
Overheads, %	47

### **3.4. Teaching Staff**

**3.4.1. Assessment of the compliance of the qualification of the teaching staff members (academic staff members, visiting professors, visiting associate professors, visiting docents, visiting lecturers, and visiting assistants) involved in the implementation of the study programme with the conditions for the implementation of the study programme and the provisions set out in the respective regulatory enactments. Provide information on how the qualification of the teaching staff members contributes to the achievement of the learning outcomes.**

Specialists with the highest professional expertise are involved in the implementation of the StP: professors, associate professors, assistant professors, also lecturers, assistants. A number of practicing professors are also full members and correspondent members of the Latvian Academy of Sciences: A. Pētersons, A. Lejnieks, S. Lejniece, D. Gardovska, L. Vīksna, M. Pilmane, etc.

To organise studies in a rational and financially efficient way, the academic work of StP “Medicine” is organised in such a way that professors, associate professors perform the work for preparation and recording of highly qualified lectures and recordings (in video format), develop new study courses, track the quality of existing courses, perform methodological work and are responsible for implementation of the principle “study through research”, as well as international cooperation and a number of other functions in accordance with the requirements of the Law on Higher Education Institutions of the Republic of Latvia. At the same time, assistants and invited lecturers mostly implement practical seminars – classes, demonstrate clinical cases of patients, lead laboratory work and monitor the daily practical progress of StP.

It should be noted that about 20% of the professors of RSU are visiting professors, reflecting the implementation of the RSU strategy of being an open and international university. For example, for several years the deputy chairman of the National Examination Board has been P. Gorecky, professor of surgery at *Charite*, German leading clinic. Students of StP “Medicine” have also acquired a new study base: in Stade, Lower Saxony, Germany, where seven different study courses are read to students of StP “Medicine” by top specialists of Elbe hospital (<https://www.krankenhaus.de/elbe-klinikum-stade/>), for example, H. Smitd, and others. Such a common strategy of RSU also has a significant and very positive impact on the quality, international supervision and development of StP “Medicine” providing the most modern and up-to-date content.

The Council of the Faculty of Medicine discusses the introduction of a new position of academic support staff who would facilitate performance of practical classes and laboratory work for a significantly large number of students of the Faculty of Medicine, and this position is the position of a lecturer assistant. It is intended to attract both students of senior years and biomedical specialists or specialists of other directions of life sciences to this position who could technically and organisationally support highly qualified lecturers of StP “Medicine”, provide support in laboratory work, ensure efficient management of student flow, create conditions of sufficient quality for simultaneous study plan for several groups – especially in basic courses: chemistry, biology, morphology, etc. This solution also provides for financial efficiency, it is being analysed and will be introduced following a discussion on guarantees for the quality of studies.

Specialists working in the healthcare industry are also involved in study work. The Faculty of Medicine cooperates most widely with representatives of the physician’s profession in Latvia, while, for example, students of the infectology course go to SIA “Centrālā laboratorija” or “E. Gulbja laboratorija”, where they are introduced to the field of laboratory medicine by laboratory specialists – lectures.

This approach not only guarantees the achievement of the study aims but also enables the study aims to be periodically improved, updated and modernised in the context of an international, modern, scientific vision and changes to the content of StP “Medicine” in general and in some of its courses to be made.

Enclosed:

Annex 24.7. Analysis of the Composition of Teaching Staff.

### **3.4.2. Analysis and assessment of the changes to the composition of the teaching staff**

## **over the reporting period and their impact on the study quality.**

To ensure high quality standards in StP “Medicine” in the academic and research fields, the programme is implemented in a manner consistent with the quality strategy and personnel policy of the whole RSU.

In the period since the previous reaccreditation, an increase in the proportion of elected academic staff was promoted, reaching 193 elected academic staff members, which is 5% higher than in the previous evaluation. This was achieved by setting scientific activity activation requirements, promoting the development and defence of doctoral theses, more active involvement in research projects, mobility through the announcement of the so-called internal RSU research grants. All these measures have made it possible for a number of academic staff to meet the requirements needed to participate in academic elections and get elected positions. This process is an important contribution to strengthening the quality of academic work, reducing staff turnover, attracting young and prospective staff to study work. 82% of elected academic staff have a doctoral degree, while 54% of the elected staff of StP “Medicine” have been awarded the status of a LSC expert.

Overall, we succeeded in increasing the proportion and contribution of highly qualified academic staff to the implementation of StP, which is crucial for its quality, sustainability, international visibility and prestige. StP “Medicine” is a high prestige carrier. This can be proved by the competition of applicants to study programme places in both Latvian and English language of studies.

A balance in the structure of academic staff should also be mentioned: most of the 193 elected academic staff are assistant professors (78) who are able to provide both high quality academic work and future staff development opportunities developed at departments of the Faculty of Medicine.

To manage the financial resources available in the field of StP staff remuneration in a rational manner, it is also essential to structure the types of academic work for the implementation of StP, and therefore the invited industry lecturers – including young physicians, residents and other teaching staff with sufficient qualifications – are actively attracted to the departments. Assistants and lecturers, acting staff in these positions and invited lecturers assist in the implementation of the study process by implementing practical classes, supporting learning by students of the content of study courses developed by lecturers, associate professors and professors, assisting in the organisation of the accurate fulfilment of the students’ plan, and performing other basic academic tasks. Estimates show that the number of lecturers invited to the Faculty of Medicine is 105; most lecturers are representatives of the healthcare industry, which reflects its real requirements and is able to make proposals to the heads of courses and the programme about the necessary improvements in relation to rapid development of the industry.

The Faculty of Medicine discusses the further structuring of staff and the possible creation of a new position – lecturer assistant. The task of such an employee would be to provide technical support during practical classes such as laboratory work, monitoring academic integrity during examinations, organising student flows in study premises, etc. The introduction of such an employee would free up lecturers’ time to implement the essential content of the class, dialogue with students and explanations on study topics, etc. This is described in the StP “Medicine” description above.

Extremely significant work has been done across RSU, including the StP “Medicine”, to attract visiting lecturers for the implementation of the programme. Currently, one in five (around 20%)



visiting professors in the programme is an international specialist, which can quite significantly improve and advise on continuous improvement of StP content. Such involvement of visiting lecturers also develops the performance of the research study programme, makes StP international, competitive, understandable and also demanded by international students, other lecturers and researchers.

All academic staff should attend qualification courses organised by the Centre for Educational Growth (CEG) at least once a year to improve their pedagogical skills. From 2017 to 2022, 303 lecturers attended CEG qualification activities. This is aimed at the development of pedagogical skills in lecturers of all levels of StP "Medicine". Teaching skills have been developed significantly as a result of these courses: new methodologies have been introduced, information technology and technical opportunities have been mastered.

Detailed statistics and data on the composition, qualification, professional development of teaching staff of StP "Medicine" are reflected in Annex 24.7.

**3.4.3. Information on the number of the scientific publications of the academic staff members, involved in the implementation of doctoral study programme, as published during the reporting period by listing the most significant publications published in Scopus or WoS CC indexed journals. As for the social sciences, humanitarian sciences, and the science of art, the scientific publications published in ERIH+ indexed journals or peer-reviewed monographs may be additionally specified. Information on the teaching staff included in the database of experts of the Latvian Council of Science in the relevant field of science (total number, name of the lecturer, field of science in which the teaching staff has the status of an expert and expiration date of the Latvian Council of Science expert) (if applicable).**

Not applicable.

**3.4.4. Information on the participation of the academic staff, involved in the implementation of the doctoral study programme, in scientific projects as project managers or prime contractors/ subproject managers/ leading researchers by specifying the name of the relevant project, as well as the source and the amount of the funding. Provide information on the reporting period (if applicable).**

Not applicable.

**3.4.5. Assessment of the cooperation between the teaching staff members by specifying the mechanisms used to promote the cooperation and ensure the interrelation between the study programme and study courses/ modules. Specify also the proportion of the number of the students and the teaching staff within the study programme (at the moment of the submission of the Self-Assessment Report).**

Heads of departments and teaching staff of the Faculty of Medicine involved in the implementation of StP “Medicine” cooperate for coordination and implementation of study content. This is organised on several levels.

1. Mutual cooperation among lecturers by meeting and discussing details of content to prevent repetition between different study courses. Students themselves play a significant role in this process. In questionnaires or directly (orally), they draw attention to similar content in different study courses.
2. Meetings between heads of departments within the faculty take place to harmonise content, for example, as part of the course of Microbiology and Infectious Diseases, coordination of the content of the Department of Obstetrics and Department of Family Medicine coordinate content, for example, family planning, disease prevention and other topics.
3. Posting of qualitative course descriptions in an e-learning environment, which is also available to heads of other departments; this prevents repetition of study content and creates a uniform consistent content of the programme.
4. Observation work among teaching staff from different departments.
5. The work of the Council of the Faculty of Medicine, which discusses and approves the study programme “Medicine”, layout of courses, their sequence, which takes place with the participation of students in the work of the Council of the Faculty of Medicine.
6. Work of the director of StP, who does the so-called mapping to draw attention to the achievement of common study aims, joint cooperation in study courses and other programme structure matters.
7. Colleagues in the Dean’s office of the Faculty of Medicine, meeting periodically with senior year students of all years of studies, draw attention to students’ opinions on current issues, including the content and consistency of study courses.
8. Surveys of students are regularly analysed, in which study content is usually one of the main topics; heads of courses are encouraged to evaluate students’ opinions and provide feedback to students.

Within the framework of the abovementioned cooperation, cooperation has been established between departments to interdisciplinarily implement study courses: for example, excellent cooperation between the three RSU structural units in the 5<sup>th</sup> year in the course “Pneumonology”. This course is implemented by the Department of Internal Diseases (major noologies), Department of Pathology (details of pathology of the said noologies) and the Medical Education Technology Centre (simulations of clinical situations and manipulations on models). A similar approach is planned to be further developed.

The ratio of students to lecturers in the study programme is 3415 students and 448 lecturers. The student-teaching staff ratio is 7.6.

# Annexes

III - Description of the Study Programme - 3.1. Indicators Describing the Study Programme		
Sample of the diploma and its supplement to be issued for completing the study programme	24.1_Diploms_Medicina_eng.pdf	24.1._Diploms_Medicina_lv.pdf
For academic study programmes - Opinion of the Council of Higher Education in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions (if applicable)		
Compliance of the joint study programme with the provisions of the Law on Higher Education Institutions (table) (if applicable)		
Statistics on the students in the reporting period	16_Anex_Stud_statistics_Medicina.pdf	16_pielik_Medicina_statistika_lv.pdf
III - Description of the Study Programme - 3.2. The Content of Studies and Implementation Thereof		
Compliance with the study programme with the State Education Standard	17.1_Anex_National_educ_standard_Medicine (1).pdf	17.1_pielik_Izglit_stand_lv_jaunais.pdf
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard or the requirements for professional qualification (if applicable)	18.2_pielik_Prof_Standarta_Kartejums_Medicina_tika_A_kursi_eng.pdf	18.2_pielik_Prof_Standarta_Kartejums_Medicina_tika_A_kursi.pdf
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)		
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	18.1_Anex_Mapping_st_courses_achiev_learn_outcomes_Medicine.pdf	18.1_pielik_Studiju_kursu_kartejums_StP_studiju_rezult_Medicina.pdf
The curriculum of the study programme (for each type and form of the implementation of the study programme)	19_Anex_Study_plan_StP_Medicine.pdf	19_pielik_Planojums_2023.pdf
Descriptions of the study courses/ modules	20_Anex_Study_course_description_Medicine.pdf	20_pielik_Kursu_apr_Medicina.pdf
Description of the organisation of the internship of the students (if applicable)	9_Anex_Organisation_of_student_placement_Medicine.pdf	9.2_pielik_Prakses_lig_apkopojuums_lv.pdf
III - Description of the Study Programme - 3.4. Teaching Staff		
Confirmation that the academic staff of the doctoral study programme includes not less than five doctors, of which at least three are experts approved by the Latvian Council of Science in the branch or sub-branch of science in which the study programme intends to award a scientific degree (if applicable)		
Confirmation that the academic staff of the academic study programme complies with the requirements specified in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions (if applicable)		

# Midwife (42723)

Study field	Health Care
ProcedureStudyProgram.Name	Midwife
Education classification code	42723
Type of the study programme	Professional bachelor study programme
Name of the study programme director	Ilze
Surname of the study programme director	Ansule
E-mail of the study programme director	Ilze.Ansule@rsu.lv
Title of the study programme director	Mg.Scsl.
Phone of the study programme director	
Goal of the study programme	<i>The Professional Bachelor's study programme "Midwifery" prepares a medical practitioner who, in accordance with the competence specified in regulatory enactments and principles of holistic care, ensures person-centred care, participates in medical treatment, organises and manages physiological pregnancy, physiological childbirth and physiological postnatal period, cares for healthy newborns and infants.</i>
Tasks of the study programme	<ul style="list-style-type: none"> <li><i>• to become a medical practitioner with higher professional Bachelor's degree education who, in accordance with the competence specified in regulatory enactments and principles of holistic care, ensures person-centred care, participates in medical treatment, organises and manages physiological pregnancy, physiological childbirth and physiological postnatal period, cares for healthy newborns and infants;</i></li> <li><i>• to educate the public and individuals in promoting sexual and reproductive health, family planning and promoting breastfeeding;</i></li> <li><i>• to promote professional education work;</i></li> <li><i>• to facilitate forming an independent, creative personality, which improves the development of midwifery practices, in accordance with current research and guidelines in the sector;</i></li> <li><i>• to improve interpersonal communication skills, command skills and leadership skills;</i></li> <li><i>• to develop self-guided learning and lifelong learning skills;</i></li> <li><i>• to increase study programme graduates' competitiveness under the changeable socio-economic circumstances in the local and international labour market.</i></li> </ul>

Results of the study programme	<p><i>1. Able to take responsibility and initiative by skilfully educating patients, their family members, care team members and the public about sexual and reproductive health.</i></p> <p><i>2. Able to discuss, take decisions and solve problems regarding measures to improve the quality of care for pregnant women and women in labour by participating in the development of the professional area, including medical treatment.</i></p> <p><i>3. Able to show the knowledge required for planning, providing and assessing the general and reproductive health care.</i></p> <p><i>4. Able to demonstrate understanding of midwifery philosophy, professional ethics, as well as legislative acts regulating their professional activity.</i></p> <p><i>5. Able to demonstrate basic and specialised knowledge in scientific areas which form the basis of woman's and her family's care, as well as knowledge of biological functions of a woman and the newborn, anatomy, physiology, and impact of physical and social environment on a person's health status and critical understanding of such knowledge, moreover, some knowledge corresponds to the highest level of achievement of the relevant scientific sector or profession.</i></p> <p><i>6. Able to take full care for the woman and her reproductive health throughout all periods of her life, manage physiological pregnancy, childbirth and post-natal care, using the theoretical bases and skills learnt. Able to carry out evaluation and care for the health condition of a newborn and a child under one year of age.</i></p> <p><i>7. Able to use knowledge in organising and managing midwifery work, takes responsibility and initiative when performing individual work, working on a team or leading other people's work, participate in medical treatment.</i></p> <p><i>8. Able to evaluate impact of their professional activity on the environment and society, understand and discuss midwifery sector matters both with specialists and laymen.</i></p> <p><i>9. Able to organise their learning independently, encourage continuous learning and professional development of their subordinates.</i></p> <p><i>10. Able to participate in quality improvement activities in health care, analyse scientific and professional information, develop and update documentation to be used in childbirth assistance, solve problems in developing clinical guidelines in reproductive health and childbirth, reduce risks in health care.</i></p>
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Final examination upon the completion of the study programme	<i>National degree examination</i>
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## Study programme forms

### Full time studies - 4 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	<i>4</i>
Duration in month	<i>0</i>
Language	<i>latvian</i>
Amount (CP)	<i>160</i>
Admission requirements (in English)	<i>Secondary education</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	<i>Professional Bachelor's Degree in Health Care</i>
Qualification to be obtained (in english)	<i>Midwife</i>

### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007
Liepāja branch of Rīga Stradiņš University	LIEPĀJA	RIŅĶU IELA 24/26, LIEPĀJA, LV-3405

### 3.1. Indicators Describing the Study Programme

**3.1.1. Description and analysis of changes in the parameters of the study programme made since the issuance of the previous accreditation form of the study field or issuance of the study programme license, if the study programme is not included on the accreditation form of the study field, including changes planned within the evaluation procedure of the study field evaluation procedure.**

*Table 1. Changes in StP parameters*

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period	Planned changes within the assessment procedure
1.	Study direction	—	—
2.	Title of StP	—	—
3.	Code according to the Latvian Education Classification	—	—
4.	Head of StP	Ilze Ansule (midwife)	—
5.	Scientific degree of the Head of StP	<i>Mg. sc. sal.</i>	—
6.	Aim of StP	Updated in accordance with the updated profession standard.	—
7.	Tasks of StP	Updated in accordance with the updated profession standard.	—
8.	Learning outcomes to be achieved	Learning outcomes have been reduced from 15 to 10 in accordance with QAHE instructions.	—

<b>No.</b>	<b>Parameter</b>	<b>Description and analysis of changes in StP parameters during the accreditation period</b>	<b>Planned changes within the assessment procedure</b>
9.	Final examination upon the completion of StP	—	—
10.	Type and form of studies	—	—
11.	Duration of implementation	—	—
12.	Language of implementation	—	During the accreditation process in 2016, the option to implement the program in English was added. However, this option was not utilized during the accreditation period, and the Faculty of Public Health and Social Welfare has decided not to retain this option for future accreditations, as they do not see the need for it. As a result, the program parameters are being revised, excluding the possibility of implementing the program in English.



<b>No.</b>	<b>Parameter</b>	<b>Description and analysis of changes in StP parameters during the accreditation period</b>	<b>Planned changes within the assessment procedure</b>
13.	Volume of StP (CP)	—	In accordance with amendments to Section 1(8) of the Law on Higher Education Institutions, which entered into force on 11 October 2022, the transition to the European Credit Transfer and Accumulation System will be implemented until 31 December 2024.
14.	Admission requirements	No additional examinations – changed made in accordance with the Education Law.	—
15.	Degree to be awarded	—	—

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation period	Planned changes within the assessment procedure
16.	Qualification to be awarded	—	In accordance with the occupational standard published on the website of the National Centre for Education (NCE) (Occupational Standard " <a href="#">Patient Care. Professional Qualification Requirements for Midwifery</a> ", (Latvian only) 07.06.2023), which has been approved by the National Tripartite Cooperation Council's Tripartite Sub-Council for Vocational Education and Employment, the qualification is changed to 'midwife'
17.	Place of implementation	—	Like the possibility of implementing the program in English, the implementation of the program at the Liepāja branch will no longer be retained on the accreditation page.

Table 1 clearly shows that since the previous accreditation the StP director has changed, learning outcomes of the StP have been updated and changes to the admission requirements have been made in accordance with the Education Law. It is important to note that for the upcoming accreditation period StP "Midwife" will not be implemented in English or in the Liepāja branch, therefore, the parameters of the StP have been amended. Previously in the accreditation period, the study program organized an additional examination as part of the admission process. However, in accordance with the Education Law, such additional examinations are no longer organized.

**3.1.2. Analysis and assessment of the study programme compliance with the study field. Analysis of the interrelation between the code of the study programme, the degree, professional qualification/professional qualification requirements or the degree and professional qualification to be acquired, the aims, objectives, learning outcomes, and the admission requirements. Description of the duration and scope of the implementation of the study programme (including different options of the study programme implementation) and evaluation of its usefulness.**

The study programme “Midwifery” is a professional study programme that **aims** to prepare a medical practitioner who, in accordance with the competence specified in regulatory enactments and principles of holistic care, ensures person-centred care, participates in medical treatment, organises and manages physiological pregnancy, physiological childbirth and physiological postnatal period, cares for healthy newborns and infants, as well as educates the public and individuals in promoting sexual and reproductive health, family planning and promoting breastfeeding, and performs professional education work.

The professional Bachelor’s study programme “Midwifery” (StP code 42 723) and its learning outcomes are planned in accordance with the profession standard for a midwife (the new profession standard "[Patient Care. Occupational Requirements for Midwife](#)" (Latvian only) was accepted on 07.06.2023.). The first part of the programme code "42" describes second level professional higher education (level 5 professional qualification and professional bachelor's degree) or second level professional higher education (level 5 professional qualification), to be obtained following general or vocational secondary education. In compliance with the first part of the programme code, the duration of full-time studies is four years. The second part of the programme code "723" describes the educational programme group "Nursing", which is considered to be a related profession. It can be seen that the StP "Midwifery" corresponds to the thematic area of health care and the thematic group health care and social welfare.

The content of the programme is based on theories and research in university pedagogy and evidence-based teaching and student learning theories that are current in the field. The study process uses current pedagogical methods such as simulation, self-directed learning, interdisciplinarity and an individual approach to the learner. According to the updated World Health Organisation (WHO) guidelines on midwifery education, "Midwifery 2030", midwives should be/become the key health care providers in maternal and child health care. The Professional Bachelor's study programme "Midwifery" implements the above principles by fulfilling the following StP **objectives**:

- to become a medical practitioner with higher professional Bachelor’s degree education who, in accordance with the competence specified in regulatory enactments and principles of holistic care, ensures person-centred care, participates in medical treatment, organises and manages physiological pregnancy, physiological childbirth and physiological postnatal period, cares for healthy newborns and infants;
- to educate the public and individuals in promoting sexual and reproductive health, family planning and promoting breastfeeding;
- to promote professional education work;
- to facilitate forming an independent, creative personality, which improves the development of midwifery practices, in accordance with current research and guidelines in the sector;
- to improve interpersonal communication skills, command skills and leadership skills;

- to develop self-directed learning and lifelong learning skills;
- to increase study programme graduates' competitiveness under the changeable socio-economic circumstances in the local and international labour market.

Based on the study courses included in the study programme, students will gain skills relevant to both general and specialised midwife's profession.

#### **Learning outcomes** of StP:

- Able to take responsibility and initiative by skilfully educating patients, their family members, care team members and the public about sexual and reproductive health.
- Able to discuss, take decisions and solve problems regarding measures to improve the quality of care for pregnant women and women in labour by participating in the development of the professional area, including medical treatment.
- Able to show the knowledge required for planning, providing and assessing the general and reproductive health care.
- Able to demonstrate understanding of midwifery philosophy, professional ethics, as well as legislative acts regulating their professional activity.
- Able to demonstrate basic and specialised knowledge in scientific areas which form the basis of woman's and her family's care, as well as knowledge of biological functions of a woman and the newborn, anatomy, physiology, and impact of physical and social environment on a person's health status and critical understanding of such knowledge, moreover, some knowledge corresponds to the highest level of achievement of the relevant scientific sector or profession.
- Able to take full care for the woman and her reproductive health throughout all periods of her life, manage physiological pregnancy, childbirth and post-natal care, using the theoretical bases and skills learnt. Able to carry out evaluation and care for the health condition of a newborn and a child under one year of age.
- Able to use knowledge in organising and managing midwifery work, takes responsibility and initiative when performing individual work, working on a team or leading other people's work, participate in medical treatment.
- Able to evaluate impact of their professional activity on the environment and society, understand and discuss midwifery sector matters both with specialists and laymen.
- Able to organise their learning independently, encourage continuous learning and professional development of their subordinates.
- Able to participate in quality improvement activities in health care, analyse scientific and professional information, develop and update documentation to be used in childbirth assistance, solve problems in developing clinical guidelines in reproductive health and childbirth, reduce risks in health care.

According to Regulations Regarding the Standard of First Level Professional Higher Education (Regulations of the Cabinet of Ministers (CM) of the Republic of Latvia No. 141 of 20 March 2001) the amount of the programme and the study course is expressed in credit points (CP). CP is an accounting unit corresponding to students' 40 working hours. Currently, there is a transition to ECTS at RSU in accordance with amendments to the Law on Higher Education Institutions.[\[1\]](#)

Several placements are anticipated in the course of studies in accordance with the curriculum. Placements are planned consecutively after theoretical study courses completed. During the first year, students learn general care and clinical skills; during the second, third and fourth years of studies – specialised clinical skills corresponding the theoretical courses; during the fourth year of studies, students learn well as work organisation and management skills of a midwife in practice.

Enrolment in professional Bachelor's study programme "Midwifery" is organised in accordance with

admission regulations:

- previous education requirement for admission to the study programme – secondary;
- centralised examination (CE) certificates, international testing institution's examination documents required for the admission are as follows: CE certificate in mathematics, CE certificate in Latvian, CE certificate in a foreign language or international testing institution's examination document, annual grade in biology or life sciences;
- there are no additional requirements;
- applicants of the study programme "Midwifery" are enrolled according to the competition results, which are made up of the CE assessments in mathematics, Latvian language, foreign language and the annual grade in biology or life sciences;
  - the total assessment of admission results is 100%, which is made up of the following indicators: 40% of the total assessment is the grade in biology or life sciences, 10% of the total assessment is the CE assessment in mathematics, 25% of the total assessment is the CE assessment in Latvian and 25% of the total assessment is the CE assessment in a foreign language or an international testing institution's examination assessment in a foreign language.

In the event of equal score, CE assessment in Latvian language is considered in the competition. Additional points are added to the total competition result for honourable places (places from 1 to 3) at olympiads: at (national) subject olympiads of the Republic of Latvia – two points, at international subject olympiads – four points. Additional points can also be received for scientific research works of pupils in the following sections: Life Sciences, Medicine and Health Sciences – at Latvian (national) scale – one point, at international scale – two points. The requirements described in the matriculation regulations are necessary not only for the assessment of potential students for studies, but also for the successful completion of the StP "Midwifery" at the level of skills and competences defined in the professional standard.

At the end of the StP, there is a national degree examination, which is organised in the professional Bachelor's study programme "Midwifery" in accordance with the Rīga Stradiņš University Academic Regulations, the RSU National Degree Examination Regulations and the procedure of a national degree examination in StP "Midwifery" approved at the Council of the Faculty of Public Health and Social Welfare (FPHSW). A national degree examination consists of a national degree exam and the defence of a final paper. The results of a national degree examination are assessed on a 10-point grade system, taking into account the assessment of the practical part / situational tasks, OSCE and test completion results. To receive a positive assessment in the national degree examination, all its parts should be passed. The purpose of the national degree examination is to test the learning outcomes achieved in accordance with the aims and content of the study programme, qualification to be awarded.

The duration of implementation of the programme is four years of studies (eight semesters) in full-time intramural studies.

The amount of the programme is 160 CP/240 ECTS, the amount of the compulsory part of study courses and the amount of placement is 154 CP/231 ECTS. Study courses of the elective part provide in-depth knowledge, skills and abilities required in the midwifery's work. Students should also choose restricted elective study courses in the amount of 4 CP/6 ECTS and free elective study courses in the amount of 2 CP/3 ECTS.

Degree to be awarded – Bachelor's degree in health care.

Qualification to be awarded – midwife.

The place of implementation is Rīga Stradiņš University, clinical placement sites are throughout the

territory of Latvia, partner education and placement bases can also be used within the framework of the Erasmus exchange programme.

Midwives may work in different types of medical treatment institutions and as self-employed persons or individual merchants in health care, thus it can be concluded that the StP complies with the study direction “Health Care”.

Enclosed:

Annex 17.1. Compliance of Professional Bachelor’s Study Programme “Midwifery” with the National Educational Standard.

Annex 24.1. Model diploma and supplement thereto.

Annex 24.8. Sample study contract.

[1] Law on Higher Education Institutions <https://likumi.lv/ta/id/37967-augstskolu-likums> (Available in Latvian only.)

### **3.1.3. Economic and/ or social substantiation of the study programme, analysis of graduates' employment.**

In accordance with the midwifery education guidelines *Midwifery 2030* (<https://www.who.int/publications/i/item/9789241515849>) developed by the World Health Organization (WHO) and *Unicef*, a midwife is / should be the provider of primary health care to the mother and the child. Latvian Health Guideline provide that health of the mother and the child is one of priorities and a midwife is entitled to independently provide physiological perinatal care. It is also economically beneficial, because the health services provided by a midwife cost less (a midwife and a physician – childbirth specialist can lead physiological perinatal care). Based on WHO and *Midwifery 2030* guidelines, midwives should be involved more not only in obstetrics, but also in primary care, thus strengthening continuity of mother and child care and health care based on individual-centred care principles.

Currently, Latvia has a large share of working midwives at pre-retirement age, therefore, a rapidly growing demand in the labour market can be expected in the next decade. However, the level of wages of midwives in the country is one of the arguments why some students choose to work in another profession or go to other countries to work as a midwife.

In the period from 30 July 2019 to 31 March 2020, at the order of RSU [within a project](#) SIA “Dynamic University” (DyU) conducted a study summarising its results in the final report “Study of competitiveness of study programmes of Rīga Stradiņš University and RSU Red Cross Medical College and compliance with medium-term and long-term labour market and industry development trends”. In accordance with the DyU study, the demand for nurses is already high and might grow in the future. It is already difficult to find qualified workers and fill the vacancies of nurses (both in Riga and in regions). The labour demand is expected to be closely related to the amount of funding of the state and European Structural Funds, which will be available in the sector. Experience in work with students, discussions with employers and this study show that nurses with proper education are in demand in the labour market. Graduates of RSU StP “Nursing Studies” are employed in state, local government and private health care.

The quality council of the study programme includes both students (from 3<sup>rd</sup> and 4<sup>th</sup> years of studies) and employers (representatives of inpatient, outpatient institutions and individual merchants). The council examines and clarifies plans for the year of studies (D-1), changes in the content of the programme, approved topics of final papers and procedures for the national degree examination.

The topics of the final paper are first examined in the Quality Council (consisting of employers, students, a representative of the board of the Latvian Midwifery Association, heads and lecturers of the faculty, department and programme), then they are examined at the Council meeting and finally evaluated by the Dean's Council. At least half of the members of the national examination board are representatives of employers, their participation promotes the principle of academic integrity and the topicality of the study programme in the labour market.

**3.1.4. Statistical data on the students of the respective study programme, the dynamics of the number of the students, and the factors affecting the changes to the number of the students. The analysis shall be broken down into different study forms, types, and languages.**

The number of students enrolled to the study programme during the reporting period was from 28 students in academic year 2016/2017 and 2017/2018 to 50 enrolled students in academic year 2019/2020, and 42 students in academic year 2020/2021 and 45 students in academic year 2021/2022.

The analysis of the dynamics of the number of students shows that the total number has grown considerably – 64 students in academic year 2016/2017, 72 students in academic year 2017/2018, and 106 students in academic year 2021/2022 and 101 students in academic year 2022/2023.

Having received positive feedback from placement supervisor in clinical base units and head of medical treatment institutions about very good and excellent preparedness of future midwives for work (it is also reflected in placement documentation assessments), it can be concluded that positive feedback has also reached the wider public.

It shows that the 1<sup>st</sup> year has numerically the highest number of enrolled students (1-13 students each academic year in the reporting period, see Annex 16). Having identified the reasons of each such student's decision, it has been concluded that those are mostly related to the change in plans for personal life. For about a half, professional Bachelor's study programme (PBSP) "Midwifery" was a "reserve" if they failed to enrol to the study programme "Medicine".

Since the absolute majority of students in the study programme "Midwifery" are women of reproductive age, every year they apply for academic leaves due to a new addition to their family. In academic years 2020/2021 and 2021/2022, individual students chose to take an academic leave to avoid the fulfilment of the vaccination requirements set by RSU and clinical base units due to Covid-19. From three to six students are also expelled in the last – 4<sup>th</sup> – year of studies, the reason was not submitting their Bachelor's thesis within the agreed deadline, poor academic achievements or not resuming studies after an academic leave.

Until now, one student has used the Erasmus opportunity to go on placement to Belgium in the last three years. This exchange programme was implemented before the Covid-19 pandemic. Four student mobilities to Finland were planned, but were cancelled due to the Covid-19 pandemic. Using the available remote study opportunities, several students (in academic year 2021/2022)

participated in three international projects:

How to protect a normal birth, within the Nordjordemodern networking (four students) there were remote (2021, 2022) joint methodical workshop seminars for all the students involved to ensure quality research work process;

Euro Imagine project on the quality of childbirth care (one student);

international student cooperation project The student midwife online global buddy study (Liverpool John Moores University, six 2<sup>nd</sup> year students and one 3<sup>rd</sup> year student from RSU participated).

During the reporting period, the number of those students increased, who studied on state-funded study places – from 48 students in academic year 2016/2017 to 73 students in academic year 2021/2022 and 61 students in academic year 2022/2023. The number of those students, who studied for their own funds, increased as well – from 16 students in academic year 2016/2017 to 40–45 students every academic year, starting from academic year 2019/2020. Therefore, it can be concluded that the popularity of the RSU study programme is growing and the programme is still topical. When mastering the midwife's profession at RSU, students can use the world's latest simulations and the possibilities created by the e-environment combined with practical training by experienced colleagues at clinical base units / placement sites.

Enclosed:

Annex 16. Statistical data on students.

**3.1.5. Substantiation of the development of the joint study programme and description and evaluation of the choice of partner universities, including information on the development and implementation of the joint study programme (if applicable).**

Not applicable.

## **3.2. The Content of Studies and Implementation Thereof**

**3.2.1. Analysis of the content of the study programme. Assessment of the interrelation between the information included in the study courses/ modules, the intended learning outcomes, the set aims and other indicators with the aims of the study course/ module and the aims and intended outcomes of the study programme. Assessment of the relevance of the content of the study courses/ modules and compliance with the needs of the relevant industry, labour market and with the trends in science on how and whether the content of the study courses/ modules is updated in line with the development trends of the relevant industry, labour market, and science.**

To be able to provide students with the opportunity to successfully become medical practitioners, who, in accordance with the competence specified in regulatory enactments and principles of



holistic care, ensures person-centred care, participates in medical treatment, organises and manages physiological pregnancy, physiological childbirth and physiological postnatal period, cares for healthy newborns and infants, educates the public and individuals in promoting sexual and reproductive health, family planning and promoting breastfeeding, performs professional education work, the study programme has been created in accordance with the profession standard for a midwife and current international midwifery education guidelines Midwifery 2030, <https://www.who.int/publications/i/item/9789241515849>. Thus, in the first year of studies students start mastering general education and industry-specific courses such as: “Civil and Environmental Protection, First Aid”, “Medical Biochemistry and Biophysics”, “Psychology and Sociology”, “Anatomy”, “Health Term and Concept”. In the second year of studies, they already master courses: “Basics of Clinical Care”, “Propaedeutics”, “Gymnastics in Pregnancy”, etc., so that they can have placement (10 days, introduction to midwife’s work in a clinical environment) already at the end of the first year of studies.

The mastering of study courses is based on the principle “from the simplest (physiology) to the most complex (pathology)”. Professional industry-specific courses (for example, “Assessment of Foetal Well-Being”, “Physiological Pregnancy Management”, “Physiological Obstetrics”, “Gynaecology”, “Newborn Feeding and Lactation”, “Management of Postnatal Period”, etc.) are implemented in accordance with the following procedure:

- learning of theory;
- practical training with models;
- simulations (based on the principle “from the simplest (physiology) to the most complex (pathology)”) motivating students to improve their competence in a safe environment, because both technical and non-technical skills.

In the process of mastering of content of study courses, simulation work is not assessed with a grade to contribute to students’ self-assurance, self-reflexion skills and self-directed learning.

In accordance with current simulation implementation guidelines and studies

(<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3195067/>;  
<https://www.hee.nhs.uk/sites/default/files/documents/Enhancing%20UK%20Core%20Medical%20Training%20through%20simulation-based%20education.pdf>;  
<https://www.healthysimulation.com/30942/what-is-the-role-of-simulation-in-healthcare-education/>)  
before each simulation:

- the scenario/situation and expected outcome are shown to students, the guidelines for action and the specific situation are discussed again;
- simulation (some of the students are in the simulation room, while other students watch real-time video of colleagues’ actions);
- discussion/reflexion (participants are organised in a circle, not at tables) on what worked well, what could/could not have been different, what are the current action guidelines in this situation, what each of them will “take along” from this simulation;
- technical and non-technical skills are strengthened within clinical placement periods (five in total).

At the end of each study course, students are offered to complete electronically and anonymously a course assessment questionnaire regarding the content of the course, the course procedures, the organisational and explanatory work, the performance of the lecturer(s). After the end of the session, it can be viewed by lecturers who give students their feedback after seeing the results. The results of student questionnaires are reviewed annually at several levels to analyse and plan quality study work in the future: they are examined by course lecturers individually, then at the meeting of

the department, followed by a Council meeting and the Dean's Council. Each year of studies the content of study courses is improved by including the latest literature and updating the content in accordance with the current developments of the field to be covered in the study course. According to the surveys of employers and based on studies on skills needed in the labour market, it is intended to strengthen skills such as critical thinking, analysis of research articles and the ability to present an idea in writing and orally in a reasoned manner. More information is available in Annex 18.1. "Mapping of the study courses for the achievement of learning outcomes of the study programme" and in Annex 23.2 "Evaluation of the Information and Methodological Base of the Library Resources for the Implementation of the Faculty of Public Health and Social Welfare Programmes in Accordance with the Requirements of the Guidelines".

Group reflexions are also implemented as part of clinical placements to promote the self-reflexion skills of future midwives and the practical use of psychological hygiene principles in professional activities. Within the framework of 3<sup>rd</sup> and 4<sup>th</sup> year clinical placements, individual discussions with students are organised to facilitate control of acquisition of practical skills in accordance with the procedures defined by the legal environment. The development of self-analysis skills and analysis assessment abilities of others' psycho-emotional state are encouraged, indirectly promoting not only the stability of the psycho-emotional state among medical personnel, midwives, but also productive cooperation in the perinatal health care team as a whole.

The study programme is implemented intramurally, in Latvian, with separate interdisciplinary study courses in English to promote self-directed learning of students, teamwork skills and competitive abilities at international level (simulation Part A course Emergency situations in Obstetrics KPUMTK\_009 for future midwives, physicians; interuniversity free elective e-study course Health promotion of families ZHAS\_049 for future midwives, nurses and dental hygienists).

For the promotion of the quality assurance of studies, as well as for the prevention and resolution of potential conflict situations, the director of the study programme regularly meets with students, listens to opinions, monitors the psychological climate in the course/group and promote the self-reflexion skills of students, encouraging compliance with the balance between study work and rest. Individual discussions with students are also organised.

Enclosed:

Annex 17.1. Compliance of the study programme with the national educational standard.

Annex 17.2. Compliance of the study programme with the industry-specific regulations.

Annex 18.1. Mapping of the study courses for the achievement of learning outcomes of the study programme.

Annex 18.2. Compliance of the qualification to be acquired upon completion of the study programme with the professional standard.

Annex 19. Planning of the study programme (for each type and form of the implementation of the study programme).

Annex 20. Description of study courses.

Annex 23.2. "Evaluation of the Information and Methodological Base of the Library Resources for the Implementation of the Faculty of Public Health and Social Welfare Programmes in Accordance with the Requirements of the Guidelines".

**3.2.2. In the case of master's and doctoral study programmes, specify and provide the justification as to whether the degrees are awarded in view of the developments and findings in the field of science or artistic creation. In the case of a doctoral study programme, provide a description of the main research roadmaps and the impact of the study programme on research and other education levels (if applicable).**

Not applicable.

**3.2.3. Assessment of the study programme including the study course/ module implementation methods by indicating what the methods are, and how they contribute to the achievement of the learning outcomes of the study courses and the aims of the study programme. In the case of a joint study programme, or in case the study programme is implemented in a foreign language or in the form of distance learning, describe in detail the methods used to deliver such a study programme. Provide an explanation of how the student-centred principles are taken into account in the implementation of the study process.**

The content of the study programme is based on higher education pedagogy and theories and studies of evidence-based teaching and learning process of students relevant for the sector. Current pedagogical methods such as simulations, self-directed learning technique, as well as interdisciplinarity and individual approaches to the student are used in the study process.

The professional Bachelor's study programme "Midwifery" has been organised as a full-time intramural programme. The study process is implemented in four years of studies (eight semesters). A year of studies consists of an autumn and a spring semester, a winter and summer session, respectively. The study process takes place according to the prepared lists of lectures and classes, as well as placement periods. During placement periods (except clinical placement I, which takes place throughout the semester parallel to studies clinical practice in antenatal care), there are no lectures and classes in other study courses.

**1<sup>st</sup> year of studies:** introduction to studies of a human and human body – anatomy, histology, embryology, biology, functional and pathological physiology, medical biochemistry and genetics, philosophy, psychology and languages, placement (placement I).

**2<sup>nd</sup> year of studies:** in-depth basic courses strengthening knowledge about a human and human body, physiological pregnancy management, breast-feeding, placement (clinical placement II).

**3<sup>rd</sup> year of studies:** clinical courses, care during labour and in the postpartum period, management of labour, abnormal pregnancies, neonatology, gynaecology, basics of clinical care, anaesthesiology and intensive care in obstetrics, emergency care, placement (clinical placement II, clinical placement III).

**4<sup>th</sup> year of study:** basics of pedagogy, organisation and management of midwife's work, public law and legal aspects of midwife's work, basics of project development and management, emergency situations in obstetrics and team work skills, research methods and statistics, basics of record keeping, development and defence of Bachelor's Thesis (clinical placement IV, placement in managing and organising midwives work).

## Principles observed in the implementation of the study programme

**Competence education** – clearly formulated learning outcomes, according to the profession standard, their successive mastering and assessment working according to the principle: “from the simplest (physiology) to more complex (pathology)”; learning outcomes, the assessment conditions, topics, technical and non-technical skills to be mastered are clearly formulated in study course descriptions.

**Synergy between the study process and the sector** – studies based on current research/guidelines and experience of the working environment; lecturers are practising midwives in both outpatient and inpatient health care systems; employers from both outpatient and inpatient health care systems, both public and private sector, are involved in the Quality Council; all students are offered to attend all meetings of the Latvian Midwifery Association, as well as to present their research papers free of charge.

**Integration of research into the study process** – linking learning and research, implementation of research approaches in study courses, expansion of students’ opportunities in research in study courses such as “Analysis of Standard in Midwifery Practice”, “Research Methods”, “Bachelor’s Thesis”, “Project Development and Financial Management”, “Care Process in Midwifery Practice”, “Course Paper in Public Health”. Industry-specific professional courses use not only up-to-date study literature in midwifery, but also latest scientific research publications and guidelines (Latvian Association of Gynaecologists and Obstetricians, GINASOC; Centre for Disease Control and Prevention, CDCP; World Health Organisation, WHO; International Confederation of Midwives, ICM; National Health Service (GB), NHS; The American College of Obstetricians and Gynecologists, ACOG, etc.).

Thanks to the activities of the e-learning environment, it is possible to place documents/hyperlinks on each particular topic, they are accessible to students 24/7, thus enabling students to organise their study process at a convenient time and place for themselves and promoting self-directed learning, and strengthening the student-centred approach to the study process as a whole. The ability of young professionals to independently analyse of scientific research publications is promoted as well; this approach is strengthened as a the self-evident skill of a health care professional in daily work. When taking industry-specific professional courses, several times students have to find latest scientific publications on independent trustworthy websites, colleagues should present their nature/opportunities for use in practice during classes. Students are involved in research projects as active researchers: *How to protect a normal birth* (five students, Nordjordemodern networking); *The Student midwife online global buddy study* (one student, John Moores Liverpool University – peer from another country).

The international and interdisciplinary experience of lecturers acquired during cooperation in international research and other projects and activities (*Nordjordemodern* networking of midwifery study programmes, *Euro Imagine*, *COST (Freedom of conscience)* research projects and *UNFPA* project on updating the content of a midwifery study programme in Turkmenistan), extensive resources with latest scientific literature, an easily accessible range of e-learning environment activities, simulation technical equipment and 3D birth simulation scenarios and clinical skills training at the Medical Education Technology Centre (METC), clinical placement base units all over the country, as well as exchange projects in other countries can be used during the implementation of the study programme.

**Digital transformation** – the study process takes advantage not only of *Zoom* and *MS Teams* opportunities, but also of the extremely wide advantages of the e-learning environment (for example, a supply of study materials is available electronically, independent study works and test works can be submitted electronically, including group work, evaluation in electronic books, chat

opportunities, interactive study possibilities – *H5P*, *Mentimeter*, etc.). To provide opportunities to develop technical and non-technical skills in obstetrics, as well as to promote self-directed learning skills, activities of the *Gynzone* platform are also available to students in full scope from 2023: <https://gynzone.com/online-courses/>. RSU is first in the Eastern European region to provide students of StP Midwifery and Residency (gynaecology) with free access to the *Gynzone* platform. Study materials from around the world are available to students – single search engine *PRIMO*, etc., databases of e-books and scientific research, all is available to students 24/7 on smart devices, thus maximising the principles of self-directed learning and individual approach to learning. For example, a student can take the final examination for an extended period of time (for example, 12 hours) in the *Respondus* system, after commencing the test, it is open for a specified period of time (for example, one hour), at a more convenient time, ensuring individual access for students also in terms of circadian rhythm and activity – everyone takes the final test at a convenient time: in the morning, in the afternoon, in the evening, etc.

**Interdisciplinarity** – review of the boundaries of theory and practice, promotion of cross-sectoral cooperation, for example, in the simulation course *Emergency Situations in Obstetrics*, in which midwives perform simulations with medical students, in the e-environment study course at *Health Promotion in Families*, which is designed as a joint e-study course for midwives, nurses and dental hygienists (RSU, *SAVONIA*, *Lithuania University*).

**Simulation-based studies** – building and strengthening technical and non-technical skills at the pre-reality stage contributes to own safety, safety of others and the quality of performance of work. In study courses such as “Physiological Pregnancy Management”, “Physiological Obstetrics”, “Methods of Assessment of Foetal Well-Being”, “Clinical Care in Obstetrics and Gynaecology”, “Basics of Clinical Care” and “Clinical Placement”, students strengthen technical and non-technical skills in simulations during placement in the METC section – in the 3<sup>rd</sup> year there are two simulation days within clinical placements, in the 4<sup>th</sup> year there are four simulation days. This ensures not only safe care for patients, but also reduces the psychoemotional burden for students, in particular when learning communication skills and teamwork skills during antenatal care, labour care and postpartum care. Simulations help students to get used to stressful situations (e.g. during labour) to be able to work efficiently with patients, their support person and the newborn – the whole family rather than one patient. The simulations help not only to technically learn how to provide care, but also to see the whole family together, be present and predict the next steps of care that will be necessary.

**Placement reflexes** are implemented during clinical placements, strengthening the mentoring approach already in the study process and helping students to acquire reflexion and self-reflexion skills.

Students, together with a clinical psychologist, who is also a practising midwife, discuss and evaluate options for maintaining psychoemotional well-being.

During placement in a clinical base unit and in the study process as a whole, there are discussions regarding the progress of professional development in the 3<sup>rd</sup> and 4<sup>th</sup> years of studies. Clinical placements are offered to students in all regions of Latvia to ensure not only a student-centred approach, but also wider development of professional skills and diversity of experience.

#### **3.2.4. If the study programme envisages an internship, describe the internship opportunities offered to students, provision and work organization, including whether the**

**higher education institution/ college helps students to find an internship place. If the study programme is implemented in a foreign language, provide information on how internship opportunities are provided in a foreign language, including for foreign students. To provide analysis and evaluation of the connection of the tasks set for students during the internship included in the study programme with the learning outcomes of the study programme (if applicable).**

RSU offers and provides placement sites for students PBSP “Midwifery” in the entire territory of Latvia in medical treatment institutions of different profiles, as well as in international exchange programmes in other countries (Finland, Belgium, etc.) within Erasmus and Nordjorde modern (Nordic midwifery networking within Nord+), students can also agree on their own placement site.

Placement takes place in an industry-specific company or organisation outside RSU – in a clinical environment in inpatient and outpatient medical treatment institutions, based on concluded cooperation agreements, guided by the head of the study course and the lecturer involved in the implementation of the study course – the placement supervisor.

The total volume of placement in the professional Bachelor’s study programme “Midwifery” is 34 CP / 51 ECTS. For the total number of placements and procedures see Annex 9.1 “Placement Regulations”.

Before the beginning of each placement, an electronic application system opens at a specified time having informed students in the e-learning environment in advance to observe the principle of academic integrity. Before the beginning of each placement, there is an introductory lesson in which students are repeatedly explained the principles of ethics and safety at workplace, as well as organisational issues according to the situation.

Clinical placements (clinical placement I, 9 ECTS; clinical placement II, 12 ECTS; clinical placement III, 9 ECTS; clinical placement IV, 15 ECTS) also include simulations in METC (two simulation days, four days in the final year) to improve the performance of safe patient care in any situation and reduce psychoemotional stress of students during placement, in accordance with the profession standard for a midwife (see Annex 9.1 “Placement Regulations” with accompanying placement documentation).

Placement reflections are implemented during clinical placements, where students, together with a clinical psychologist, who is also a practising midwife, discuss and evaluate options for maintaining psychoemotional well-being when performing placement in a clinical base unit and in the study process as a whole. In the 3<sup>rd</sup> and 4<sup>th</sup> years of studies, there are talks regarding the progress of professional development so that the student is able to recognise in a timely manner, even before the beginning of the end of the study process, what skills still need to be acquired, thus also promoting independent continuing education skills and skills of future midwives, which will also need to be developed after graduation from the study programme.

After each placement, all completed placement documentation is downloaded in e-studies so that during individual conversations it is possible to return to previous placements and objectively assess the student’s ability to set individual goals during the next clinical placement period.

Midwives – heads of departments and medical treatment institutions in various municipalities of Latvia, both in the outpatient and inpatient health care sector (both public and private sector) – are invited as placement supervisors in the study course “Placement in Managing and Organising Midwives Work”:

- Solvita Urbanoviča, midwife, chief nurse at Liepāja Regional Hospital;
- Antra Kupriša, midwife, chief nurse at Vidzeme Regional Hospital;
- Edīte Domaševa, midwife, Head of the Department of Gynaecology at the “Centre of Woman’s Health Aura”;
- Astrīda Millere, midwife, head of “Midwifery Practice of Astrīda Millere”;
- Anete Baškevica, midwife, Head of the Service Development Department of the National Health Service (NHS);
- Jūlija Mališauskiene, midwife, senior midwife at the Department of Obstetrics and Gynaecology of Ogre Regional Hospital;
- Signe Irša, midwife, senior midwife at the Department of Obstetrics and Gynaecology of Pauls Stradins Clinical University Hospital (PSKUS);
- Valentīna Beļavska, midwife, senior midwife of the Outpatient Prenatal Care Department of the Riga Maternity Hospital;
- Aija Mikova, Head of the “Midwifery Practice of Aija Mikova”;
- Laura Boreja, midwife, senior midwife at the Obstetrics Department of Jelgava Hospital.

The director of the study programme “Midwifery” contacts placement supervisors before and after placement to clarify aims and tasks of placement, as well as agree on details of placement:

- the degree of detail and scope of information provided to students;
- type of independent work and possibilities of implementation and testing;
- explain the procedure of cumulative assessment;
- discuss features of the psychological field of the specific study course.

Enclosed:

Annex 9. Description of the organisation of placement of the students.

### **3.2.5. Evaluation and description of the promotion opportunities and the promotion process provided to the students of the doctoral study programme (if applicable).**

Not applicable.

### **3.2.6. Analysis and assessment of the topics of the final theses of the students, their relevance in the respective field, including the labour market, and the marks of the final theses.**

At the beginning of each 4<sup>th</sup> year of studies, seminars are organised for students in e-studies so that they get an idea about potential final paper supervisors and the list of topics they supervise, as well as the application procedure. Already in the 3<sup>rd</sup> year, the procedure of choosing the topics of Bachelor’s thesis are discussed with students. For those 4<sup>th</sup> year students who only enrol only for the last year of studies (college graduates) informative seminars are organised immediately during the first days of studies. Once the student has contacted the selected potential paper supervisor by email, a remote or face-to-face tutorial is mutually arranged. At the beginning of October, the

student completes form B1, where he or she substantiates the title, topicality, purpose, tasks, etc. of his or her paper (see form B1 in Annex 22.1). Topics of students' final papers are approved in three phases:

- in the Quality Council (consisting of employers, students, representatives of the board of the Latvian Midwifery Association and teaching staff);
- at a Faculty Council meeting;
- in the RSU Dean's Council.

This ensures that the topics of final papers are in line with current guidelines both in the labour market and science (including in line with the latest WHO and ICM guidelines).

<https://www.who.int/publications/i/item/9789241550215>;

<https://www.internationalmidwives.org/our-work/policy-and-practice/philosophy-and-model-of-midwifery-care.html>).

In years of studies 2021/2022 and 2022/2023, students develop their final papers within two international projects (*Nordjordemodern* networking *How to protect a normal birth* and *Euro Imagine*).

Here is a summary of the subjects of Bachelor's theses of the past two years grouped into five professional industry blocks:

- 1) three blocks – perinatal care stages;
- 2) working conditions of midwives;
- 3) reproductive health /research and projects of industry guidelines.

### **Health care in the antenatal period**

- The level of anxiety during pregnancy and its association with intrauterine growth restriction.
- Experience in engaging in decision-making on elective caesarean section in women at different ages.
- Factors of choosing a physiological pregnancy care professional in women with first and repeated pregnancies.
- Midwife's experience in recognising family violence during antenatal care.
- Opinion of health care professionals: experience relating to miscarriage.
- Relation of the knowledge acquired during prenatal training courses to the duration of labour in primiparas.
- A maternity plan drawn up by pregnant women – its impact on the outcome of labour.
- Dietary habits and lifestyle aspects of pregnant women with gestational diabetes in socio-demographic groups in Latvia.
- Effects of maternal smoking on pregnancy outcome, newborn's birth weight and Apgar score.

### **Health care in the intranatal period**

- The opinion of midwives on the concept of "normal birth" and their experience of protecting them in the hospital in relation to hospital obstetric care protocols (Bachelor's thesis is being developed in an international research project, *How to protect a normal birth*, networking *Nordjordemodern*).
- Women's opinion on the use of epidural anaesthesia in labour.
- Use of intranatal care recommendations during different labour periods in relation to midwife's period of work.
- Midwife's experience in an inpatient team of obstetricians in the context of ensuring normal



birth (Bachelor's thesis is being developed in an international research project, *How to protect a normal birth*, networking *Nordjordemodern*).

- The course and outcome of a birth attempt after prior caesarean section.
- Primipara's stress level in the post-natal period related to partner support in labour.
- Premature birth and risk factors.
- Experience of midwives and women on the labour wish list.
- Opinion of midwives working in hospitals regarding the quality of labour: determining criteria and possibilities for evaluation thereof, based on the statistics available in Latvia.
- Knowledge about epidural anaesthesia among pregnant women of different ages.
- The opinion of midwives on the concept of "normal birth" and their experience of protecting them in the hospital in cooperation with the woman (Bachelor's thesis is being developed in an international research project, *How to protect a normal birth*, networking *Nordjordemodern*).
- Births with a small inter-birth interval, perinatal risks and birth outcomes.
- Course and outcome of birth in primiparas using epidural analgesia in birth.

### **Health care in the postnatal period**

- Comparison of the therapeutic efficacy of breast milk and lanolin in treating women with nipples cracked as result of lactation.
- Sexual function in women in the first year after childbirth and its relationship to satisfaction in a partner relationship.
- Woman's experience in cooperation between with childbirth partner and midwife in hospital labour.
- Manifestation of postpartum depression symptoms related to the type of delivery.
- Sexual dysfunction in primiparas after perineal tears and episiotomy.
- Labour induction and initiation of breastfeeding.
- Women's awareness of pelvic floor muscle strengthening exercises.
- Parents' understanding of handling, impact on neonatal care.
- Relationship of the type of birth to successful breastfeeding during the first postpartum week.

### **Working conditions of midwives (team work, workload, autonomy, job satisfaction, etc.)**

- Stress management techniques among midwives.
- Experience of midwives in communication between a midwife and a physician.
- Number of births, birth posture and urinary incontinence after childbirth.
- Burnout and job satisfaction in midwives.
- Midwives' job satisfaction and its relationship to psychosocial working environment risk factors.
- Burnout syndrome for inpatient midwives in relation to the number of years worked in the profession.
- Availability of information on lactation to who have given birth during the first month after discharge from hospital.

### **Reproductive health/research and projects of industry guidelines**

- Guidelines on quality determinants for perinatal care.
- Understanding of sexual and reproductive health issues in social demographic groups of pregnant women in Latvia.
- Compliance of maternal and child care with standards of the World Health Organization (Bachelor's thesis is being developed in the research project *Euro Imagine*).

Since 2016, all Bachelor's theses have been assessed successfully – from the lowest assessment of

5 (satisfactory) to up to 10 (with distinction). The majority (more than 50%) of members of the Bachelor's thesis assessment commission are employers in the sector and representatives of the board of the Latvian Midwifery Association. For the third year of studies, all members of the commission have access to the e-learning environment so that, at a convenient time before the Bachelor's thesis is defended, they can be read without haste. The theses, which are recognised as particularly important in the midwife's profession, are regularly presented at meetings of the Latvian Midwifery Association so that as many practising midwives as possible can be informed about the results, conclusions and proposals of the research and promote synergy of research with the midwife's practical work.

Enclosed:

Annex 22. Topics of students' final papers.

Annex 22.1. Form B1.

### 3.3. Resources and Provision of the Study Programme

**3.3.1. Assessment of the compliance of the resources and provision (study provision, scientific support (if applicable), informative provision (including libraries), material and technical provision, and financial provision) with the conditions for the implementation of the study programme and the learning outcomes to be achieved by providing the respective examples.**

Studies are implemented at RSU study base units and clinical placement sites all over Latvia covering hospitals of all three levels of perinatal care (PSKUS, Riga Maternity Hospital, Jurmala Hospital, Ogre Regional Hospital, Jelgava Hospital, Liepaja Hospital, Northern Kurzeme Regional Hospital, Vidzeme Hospital, Daugavpils Hospital, Rezekne Hospital, Kuldiga Hospital, Dobele Hospital) and outpatient care institutions (VC4, Salaspils Health Centre, Medical Centre ARS, physician's practice "Quartus", physician's practice of Ilze Katlapa), as well as private practices of midwives (Midwifery Practice of Astrīda Millere and Birth House "Midwifery Practice of Aija Mikova).

Clinical skills are first acquired at METC, initially strengthening technical skills with models, then strengthening clinical and learning non-technical skills in the simulation process, implementing them based on the principle "from the simplest (physiology) to the most complex (pathology)", strengthening students' non-technical skills not only in dealing with a woman, newborn and team work, but also in cooperation with other family members.

METC has the latest and highest quality models and simulation equipment available in the world in the field of obstetrics, including:

- high-fidelity childbirth manikin, *CAE Lucina* (virtual reality glasses with video options to see action scenarios and foetal movements, and birth progress using different action algorithms);
- high-fidelity newborn manikin, *Laerdal SimNewB*;
- high-fidelity newborn manikin, *Medvision Mia*;
- CPR newborn manikin *Laerdal NewBorn Anne*;
- cardiotocography simulator *3B Scientific CTGi*;

- simulation recording and postprocessing system, *SIM Station ProGen2*;
- maternity simulation jacket, *Koken Maternity Simulation Jacket*;
- breastfeeding trainer, *Laerdal MamaBreast*;
- anatomical pelvis and baby skull model, *Erlor Zimmer Pelvis for Demonstration of Birth Canal*;
- breast palpation trainer, *Limbs&Things Breast Examination Trainer*;
- gynaecological examination trainer, *Adam Rouily Gynecological care training manikin*;
- ultrasound simulator, *MedSim UltraSim*;
- woman's bladder catheterisation trainer, *Limbs&Things Catheterization Trainer*;
- suturing trainer, *Limbs&Things Skin Pad*;
- vacuum extractor, *KIWI OmniCup*;
- birthing trainer, *Limbs&Things PROMPT Flex Birthing Simulator Standard*;
- Leopold manoeuvre trainer, *Koken Maternity Model Type II*;
- perineal and episiotomy trainer, *Limbs & Things Perineal&Episiotomy Repair Trainer*; *Keele & Staffs Episiotomy Repair Trainer*;
- delivery bed, *Linet AVE2*;
- paediatric bed, *Linet AVE2+*, and paediatric bed heating system, *Linet AVE2*;
- baby changing table;
- instrument table with rails;
- high-fidelity birth manikin, *Laerdal SimNewB*.

Simulation room "Birthing room" (METC, 203. A) has been equipped, where work can be done in all three birthing periods, as well as in antenatal and postnatal care simulating both physiological and pathological situations in obstetrics. Delivery can be managed here at minimum lighting and using auxiliary equipment (birth chair, balls, mattresses and scarves) so that students are ready for work in a clinic in accordance with current guidelines in the sector and to be able to provide safe and person-centred perinatal care.

All course descriptions, study literature and additional sources of information are available to students remotely in the e-environment, incl. also interactive study material learning activities (for example, *HP5*, etc.). All scientific literature is available to students in smart devices, thus ensuring maximum student-centred approach and promoting self-directed learning and the study process directed by students themselves.

Enclosed:

Annex 23.2. Assessment of the informative and methodological provision regarding library resources for the implementation of the Faculty of Public Health and Social Welfare study programmes in accordance with the requirements of the guidelines.

Annex 23.3. Assessment of the information and methodological base on IT resources.

### **3.3.2. Assessment of the study provision and scientific base support, including the resources provided within the framework of cooperation with other science institutes and higher education institutions (applicable to doctoral study programmes) (if applicable).**

Not applicable.

**3.3.3. Indicate data on the available funding for the corresponding study programme, its funding sources and their use for the development of the study programme. Provide information on the costs per one student within this study programme, indicating the items included in the cost calculation and the percentage distribution of funding between the specified items. The minimum number of students in the study programme in order to ensure the profitability of the study programme (indicating separately the information on each language, type and form of the study programme implementation).**

The study programme is planned to be financed from state budget funds and the funds of individuals and legal entities setting the tuition fee in accordance with the state budget funding without social security of EUR 4890 per year of studies. The tuition fee can be subject to discounts in accordance with internal norms and regulations. The number of students planned to be achieved in the StP in four years of studies is 105 students, enrolling 30 students in the first year, planning a drop-out of 4 students in the second year, a drop-out of 4 students in the third year and with the number of students remaining unchanged in the fourth year. Following high inflation and under conditions of a rapid increase in prices of energy sources, the result of the study programme is negative, because there is shortage of funding from state budget funds in accordance with CM Regulations No.994 – study base costs no longer cover infrastructure maintenance costs. The information on additional performance funding allocated, which was approved in the budget of the Ministry of Education and Science, will be available in the second half of 2023.

Funding is used for staff remuneration, attraction of visiting lecturers, taxes, maintenance of IT infrastructure, purchase of equipment and devices. In addition to the direct costs of the implementation of lectures and classes, the StP must cover the infrastructure maintenance costs (facilities, IT solutions) and other RSU common resources used in StP (Student Service, Library, organisation of the study process, grant for the Student Union and other support and administrative functions).

StP is implemented by the RSU Faculty of Public Health and Welfare Department of Nursing and Obstetric Care, Department of Health Psychology and Pedagogy, Department of Public Health and Epidemiology, Department of Welfare and Social Work and Department of Sports and Nutrition, Faculty of Medicine Statistical Unit, Department of Pathology, Department of Human Physiology and Biochemistry, Department of Obstetrics and Gynaecology, Department of Biology and Microbiology, Institute of Anatomy and Anthropology Department of Morphology, Department of Anaesthesiology and Intensive Care, Department of Physics, Department of Internal Diseases, Department of Paediatrics, Department of Clinical Skills and Medical Technologies and Department of Infectology, Faculty of Pharmacy Department of Pharmacology, Faculty of Rehabilitation Department of Rehabilitation, Institute of the History of Medicine, Faculty of Dentistry Department of Conservative Dentistry and Oral Health and Language Centre. Remuneration of the academic staff in the first year of StP is planned to be approximately 81 thousand EUR.

*Table 2. Information on student costs*

**Costs of the study programme in the Latvian flow**

Name	Result with the existing tuition fee	Result with the projected tuition fee
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Average income per student, EUR	3839	4027
Average cost per student, EUR	5597	5697
Academic staff, %	49	48
Department resources, %	4	4
Students' clinical training and placement, %	2	2
Other direct expenditure, %	1	1
Scholarships, %	3	3
Fixed costs, %	5	4
Overheads, %	36	38

### 3.4. Teaching Staff

**3.4.1. Assessment of the compliance of the qualification of the teaching staff members (academic staff members, visiting professors, visiting associate professors, visiting docents, visiting lecturers, and visiting assistants) involved in the implementation of the study programme with the conditions for the implementation of the study programme and the provisions set out in the respective regulatory enactments. Provide information on how the qualification of the teaching staff members contributes to the achievement of the learning outcomes.**

Based on the results of an anonymous student survey and taking into account also the expert recommendations indicated during the previous accreditation about the biggest share of midwives in the StP, and implementing the possibilities to improve the quality of the study process, including *Midwifery 2030* recommendations for improving midwifery education, more leading specialists / leaders have been involved so that students receive not only scientific research based latest information, but also practical experience based insights and promote leadership in professional growth of a midwife:

**Signe Irša**, midwife, senior midwife at the Department of Obstetrics and Gynaecology of Pauls Stradins Clinical University Hospital (PSKUS) (Level 1 perinatal care centre, the only one in Latvia), chairwoman of the Certification Commission of the Latvian Midwifery Association. Head of study courses "Assessment of Foetal Well-Being", "Clinical Care in Obstetrics and Gynaecology", "Care for a Healthy Woman". Simulation trainer METC, mastered the professional improvement programme "Introduction for Simulation Trainers", head of continuing education courses at RSU – "Primary Intensive Care of a Newborn", "Assisting with birth within work of the Emergency Medical Service".

**Laila Laganovska**, midwife in the Maternity Centre of the Riga Maternity Hospital, one of the largest obstetric assistance institutions in Europe, about 6000 births per year. Practicing clinical psychologist, works with women and families to promote psychological recovery after traumatic birth experience or experiencing loss during the perinatal period. Head of study courses “Placement I” and “Newborn Feeding and Lactation”. Supervisor of clinical placement reflexions, works with students to provide a possibility to master technical and other skills in work with patients, who experienced loss in the process of perinatal health care.

**Valentīna Beļavska**, midwife at the Riga Maternity Hospital, senior midwife of the Outpatient Prenatal Care Department. Head of study courses “Clinical Placement I” and “Sexual and Reproductive Health”.

**Ilze Ansule**, midwife at the Department of Obstetrics and Gynaecology of Ogre Regional Hospital. Head of study courses “Physiological Obstetrics”, “Emergency Situations in Obstetrics”, “Care Process in Midwifery Practice”, “Course Paper in Analysis of Standard in Midwifery Practice” and “Clinical Placements II, III and IV”. 3<sup>rd</sup> year students of the doctoral study programme “Medicine”. Simulation trainer at METC, head of continuing education courses at METC “Assisting with birth within work of the Emergency Medical Service”, mastered the professional improvement programme “Introduction for Simulation Trainers”.

**Kristīne Reitere**, midwife in the Maternity Centre of the Riga Maternity Hospital, one of the largest obstetric assistance institutions in Europe, about 6000 births per year, visiting lecturer.

**Edīte Domaševa**, midwife, Head of the Department of Gynaecology at the “Centre of Woman’s Health Aura”, visiting lecturer.

**Māra Grieze**, midwife at the Obstetrics Department of Sigulda Hospital, member of the Latvian Association of Home Birth Families, visiting lecturer.

**Anete Baškevica**, midwife, Head of the Service Development Department of the National Health Service (NHS), visiting lecturer.

**Astrīda Millere**, midwife, head of “Midwifery Practice of Astrīda Millere”, chairwoman of the Latvian Association of Home Birth Families, visiting lecturer.

**Aija Mikova**, head of “Aija Mikova – Midwifery Practice”, member of the Latvian Association of Home Birth Families, visiting lecturer.

By involving persons working at different perinatal care levels and sectors in the process of implementation of midwifery studies, students gain comprehensive and unique experience and skills in an extensive coverage of midwifery practice. The largest number of academic staff members involved in the implementation of the study programme are lecturers, namely, 8 employees. Additionally, 3 professors, 4 associate professors, 5 lecturers, and 2 assistants are also involved in the programme's implementation.

Lecturers with a doctoral degree also participate in the implementation of the study process (15 out of 22 elected academic staff members):

*Dr. med.* **Toms Pulmanis** – Vice-Dean Faculty of Public Health and Social Welfare, head of study courses “Public Health and Epidemiology” and “Course Paper in Public Health”;

*Dr. med.* **Agita Melbārde-Kelmere** – medical nurse, head of the study course “Basic Principles of Infection Prevention and Control in Health Care”;

*Dr. med.* **Olga Fokina** – medical nurse, head of the study course “Research Methods”;

*Dr. med.* **Kristaps Circenis** – medical nurse, head of the Department of Nursing and Obstetric

Care, lecturer of the study course “Patient and Work Environment Safety”.

Active involvement of lecturers in research, integration of doctoral students in academic work should also be emphasised:

- in 2021, participation in international conferences of RSU and Rezekne Higher Education Institution;
- presentation in a conference of midwives in Helsinki in May 2022;
- participation of lecturers in continuing education organised by diaspora medical nurses and midwives, the Latvian Midwifery Association and Latvian Nurses Association in summer 2021;
- work on the project *United Nation Population Fund (UNFPA)*, developed practical recommendations to improve the quality of education of midwives in Turkmenistan (May – October 2021);
- international research project *Euro imagine* – studies the experience of woman’s care process during birth (Elizabete Pumpure);
- on 12 – 14 September 2022, participation in the *Normal Labor* international conference of midwives and research;
- Denmark, Aarhus, on 12 – 14 September 2022, oral presentation and poster presentation within a doctoral thesis;
- international research project *How to protect a normal birth*, within the *Nordjordemodern* networking; four students also participate in the project as part of their Bachelor’s thesis, project manager *Pernilla Stenback* (from 2021 to the end of 2023);
- *COST Freedom of choice*, project manager, professor *Valerie Fleming*, *Liverpool John Moores University*;
- international student cooperation project *The student midwife online global buddy study* (one 2<sup>nd</sup> year student from each country is involved), project manager *Clare Maxwell*.

12 lecturers, or approximately 52% of all the elected lecturers involved in the implementation of the study programme since 2017, have been employed in RSU's scientific projects at least once. The diverse experience of lecturers provides students with the opportunity to acquire up-to-date knowledge in the field, as they prepare study courses that combine theory with practical examples. The qualifications and experience of the teaching staff meet the requirements for implementing the study programme and the legal regulations.

From 1 January 2017 to 1 October 2022, 45 lecturers of the Bachelor’s study programme “Midwifery” participated in continuing education activities of the Centre for Educational Growth (CEG) attending more than 160 training activities of different content. The lecturers of the study programme “Midwifery” spent 3953 academic hours on mastering continuing education activities.

The lecturers participated in the following activities: Creation of animated visual studio materials; Reference management tool *EndNote*; Remote work of student groups with the *Miro* tool; Open access to scientific information; *Collaboration and Partnership Towards Professional and Sectoral Development: Local, National, Transnational*; *Creating Engaging and Interactive Classrooms through Active Learning Techniques*; The *PubMed* database and its tools for searching for scientific publications; Possibilities and comparison of *Web of Science* and *Scopus* databases; Digital nuisances – changes and innovations encouraging organisations to change; Teaching in intercultural environments; Creation of electronic tests; Drafting of interactive study materials (H5P); Creating interactive content in the e-learning environment (H5P); Interactive presentations and real-time feedback in the *Mentimeter* tool; The potential of immersive technologies for effective learning strategies; Improvisation in pedagogical activities; How to promote the acquisition of transversal skills relevant to the working environment in the study process? Potential of conflict for

building cooperation; Research methodology and statistical processing of data; Mediation – wilful and responsible conflict resolution culture at a university; Visualization of content in presentations; Development of a study course. Formulation and evaluation of learning outcomes; Creating videos: complex in a simple and short way and many other.

Enclosed:

Annex 24.7. Analysis of the composition of the teaching staff.

### **3.4.2. Analysis and assessment of the changes to the composition of the teaching staff over the reporting period and their impact on the study quality.**

Since the previous accreditation, additional Latvian-speaking practicing midwives from abroad have been involved in the implementation of the study programme, including those from the United Kingdom (midwife Lita Zālīte) and Germany (midwife Ilze Leimane), as well as Norway (midwife Linda Mātere), to enhance students' awareness of real aspects of the professional working environment in other countries. Several guest lectures and seminars have taken place, for example:

- 1) "Assessment of the Newborn's Condition Using CTG Record Method" (Pernilla Stenback, Finland, Savonia University of Applied Sciences), thereby developing students' competence in the application of current methods in assessing fetal well-being.
- 2) "Qualitative Research Methods in Midwifery Knowledge" (Prof. Valerie Fleming, Clare Maxwell, UK, Liverpool John Moores University), thereby enhancing students' research skills and skills in evaluating relevant research in the field.

A new professional development program, "Midwifery Practice within NMPD work," has been created, developed and implemented by the lecturers of the "Midwife" StP, midwives Signe Irša and Ilze Ansule, practically promoting interprofessional education and collaboration in promoting safe healthcare for mothers and children.

An additional lecturer with a doctoral degree, Agita Melbārde-Kelmere, has been recruited to facilitate the development of students' competencies in conducting theoretical parts of courses with a focus on current research work.

### **3.4.3. Information on the number of the scientific publications of the academic staff members, involved in the implementation of doctoral study programme, as published during the reporting period by listing the most significant publications published in Scopus or WoS CC indexed journals. As for the social sciences, humanitarian sciences, and the science of art, the scientific publications published in ERIH+ indexed journals or peer-reviewed monographs may be additionally specified. Information on the teaching staff included in the database of experts of the Latvian Council of Science in the relevant field of science (total number, name of the lecturer, field of science in which the teaching staff has the status of an expert and expiration date of the Latvian Council of Science expert) (if applicable).**



Not applicable.

**3.4.4. Information on the participation of the academic staff, involved in the implementation of the doctoral study programme, in scientific projects as project managers or prime contractors/ subproject managers/ leading researchers by specifying the name of the relevant project, as well as the source and the amount of the funding. Provide information on the reporting period (if applicable).**

Not applicable.

**3.4.5. Assessment of the cooperation between the teaching staff members by specifying the mechanisms used to promote the cooperation and ensure the interrelation between the study programme and study courses/ modules. Specify also the proportion of the number of the students and the teaching staff within the study programme (at the moment of the submission of the Self-Assessment Report).**

Lecturers meet regularly (every 6<sup>th</sup> week) at department meetings, which have been attended much more widely in recent years thanks to remote organisation possibilities. As participants work in different study programmes, there is also an interdisciplinary exchange of thoughts and “brainstorming” about certain news or problem.

Individual lecturers of the study programme meet every other month at meetings of the Latvian Midwifery Association (Latvia is not a large country and all teaching midwives are also members or board members of the Latvian Midwifery Association, or members of the Latvian Midwives Certification Commission).

Informal meetings of midwives participating in the study programme are organised separately to monitor the level of vitality of lecturers, to support each other psychoemotionally and to participate in the exchange of thoughts, to assist each other with ideas and practical proposals, how the following can still be implemented:

- a student-centred approach;
- promoting students’ self-directed learning skills;
- ensuring not only up-to-date, but also engaging and interesting lectures/classes;
- the balance between work and rest, how to maintain and develop this ability.

Each year, in celebration of the International Day of the Midwife, seminars are held on current developments in the profession, such as “Midwife yesterday, today, tomorrow!” together with midwives, lecturers, students and placement supervisor in 2021, “Midwife’s well-being at work” in 2022, while on 10 May 2023, in celebration of the International Day of the Midwife, RSU, together with the Latvian Midwifery Association and the Maternity Hospital Foundation (DZNF), will implement the developed project “Pregnancy and childbirth in Latvian folklore and traditions”. Members of the Latvian Midwifery Association are also offered to attend these events.

The ratio of the number of students and teaching staff in the study programme is: 117 students and 53 lecturers. The ratio of students to teaching staff is 2.2.

# Annexes

III - Description of the Study Programme - 3.1. Indicators Describing the Study Programme		
Sample of the diploma and its supplement to be issued for completing the study programme	24.1_AnxDiploma and supplement_Midwifery.pdf	24.1_pielik_Diploms un pielikums_PBSP Vecmate.pdf
For academic study programmes - Opinion of the Council of Higher Education in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions (if applicable)		
Compliance of the joint study programme with the provisions of the Law on Higher Education Institutions (table) (if applicable)		
Statistics on the students in the reporting period	16_Anx_Statistical data_students_Midwifery.pdf	16_pielik_Studejoso statistika_PBSP Vecmate.pdf
III - Description of the Study Programme - 3.2. The Content of Studies and Implementation Thereof		
Compliance with the study programme with the State Education Standard	17.1_AnxCmplance_with_Nat_Ed_Stand_Midwifery.pdf	17-1_pielik_PBSP Vecmate_atbilstiba_izglitiba_standartam.pdf
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard or the requirements for professional qualification (if applicable)	18.2_AnxCmpl_with_occupational standard_Midwifery.pdf	18.2_pielik_StP Vecmate atbilstiba profesiju standartam.pdf
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)	17.2_AnxCmplance_with_Industry-Specific_Regul_Framew_Midwifery.pdf	17.2_pielik_atbilstiba_nozares_norm_regul_Vecmate.pdf
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	18.1_Anx_St_course_mapping_to_achieve_learn_outcomes_Midwifery.pdf	18.1_pielik_St_kursu_kartej_st_rezult_sasn_Vecmate.pdf
The curriculum of the study programme (for each type and form of the implementation of the study programme)	19_Anx_Study plan_PBSP Midwifery.pdf	19_pielik_PBSP_Vecmate planojums.pdf
Descriptions of the study courses/ modules	20_Anx_Study_course_description_Midwifery.pdf	20_pielik_Kursu_apr_Vecmate.pdf
Description of the organisation of the internship of the students (if applicable)	9_Anx_Student placement organisation_Midwifery.pdf	9_pielik_Studejoso prakses organizācijas apraksts.pdf
III - Description of the Study Programme - 3.4. Teaching Staff		
Confirmation that the academic staff of the doctoral study programme includes not less than five doctors, of which at least three are experts approved by the Latvian Council of Science in the branch or sub-branch of science in which the study programme intends to award a scientific degree (if applicable)		
Confirmation that the academic staff of the academic study programme complies with the requirements specified in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions (if applicable)		

# Health Care (51721)

Study field	<i>Health Care</i>
ProcedureStudyProgram.Name	<i>Health Care</i>
Education classification code	<i>51721</i>
Type of the study programme	<i>Doctoral study programme</i>
Name of the study programme director	<i>Ilze</i>
Surname of the study programme director	<i>Konrāde</i>
E-mail of the study programme director	<i>ilze.konrade@rsu.lv</i>
Title of the study programme director	<i>Prof., Dr. med.</i>
Phone of the study programme director	
Goal of the study programme	<i>Applying an integrated and complementary approach that enables addressing current challenges related to human health, to prepare highly qualified scientists and teaching staff in the fields of health care in medicine, pharmacy and psychology in order to realise and independently manage research projects both in Latvia and internationally, as well as develop academic competence for ensuring the continuity and sustainability of education.</i>
Tasks of the study programme	<p><i>To provide doctoral students with the opportunity to acquire the competences necessary for scientific research in an extended interdisciplinary and multidisciplinary context, to carry out industry-relevant, original and innovative research, to increase scientific excellence at the level of internationally quoted publications.</i></p> <p><i>To provide doctoral students with the opportunity to acquire competencies that contribute to the dissemination of knowledge in society at the national and international level, as well as to the integration of research and academic work.</i></p> <p><i>To provide doctoral students with the opportunity to acquire competence to independently improve their scientific qualifications in order to carry out or manage research or development projects meeting international criteria at the national and international level in fields of research relevant to the sector.</i></p>

Results of the study programme	<p>1. Analyses and explains current scientific theories and modern research methods, integrates knowledge and competences acquired in interdisciplinary and multidisciplinary education in a complementary way in the implementation of original scientific projects and academic work.</p> <p>2. Independently develops an original study in the sector, using a methodology that meets modern scientific requirements and digital technologies, critically evaluates the results obtained and disseminates them by preparing presentations at conferences and publishing internationally citable scientific articles, thus contributing to solving problems related to human health and knowledge boundaries and providing a new understanding of existing knowledge and their use in practice.</p> <p>3. Carries out scientific communication on their field of scientific activity in a national and international scientific space, engaging in organisations and consortia as well as society as a whole, including does academic work in the medical, pharmaceutical and psychology sectors in line with the achievements of modern pedagogy, ensuring the integration of research and academic work.</p> <p>4. Independently improves their scientific qualifications and implements or leads research or development projects that meet international criteria in the sector in companies, institutions, organisations.</p> <p>5. Consistently improves communication, argumentation, cooperation, problem solving, digital and other widely used skills that are vital for the development of interdisciplinary/multidisciplinary research.</p>
Final examination upon the completion of the study programme	Doctoral examinations and scientific results assessed by the scientific activity evaluation commission.

## Study programme forms

### Full time studies - 4 years - english

Study type and form	Full time studies
Duration in full years	4
Duration in month	0
Language	english
Amount (CP)	176

Admission requirements (in English)	<i>In Medicine: a Master's degree in health care or an equivalent degree in medicine, dentistry, biology, biomedicine or pharmacy; In Pharmacy: a Master's degree in health care or an equivalent degree in pharmacy, chemistry, medicine, stomatology or biology, or a Master's degree of engineering in materials sciences; in Psychology: a Master's degree in psychology or a corresponding higher education diploma in social and human action sciences or health care, or social welfare, or in pedagogy education and education sciences or in humanities. An applicant who has not obtained a Master's or Bachelor's degree in psychology must additionally pass an entrance examination in the basic branches of psychology: general (cognitive) psychology; developmental psychology; personality psychology; social psychology; clinical psychology, health psychology. For studies in English, a proof of English language proficiency of at least level B2.</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	<i>Doctor of Science (PhD) in Medicine and Health Sciences or Doctor of Science (PhD) in Social Sciences</i>
Qualification to be obtained (in english)	-

### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

### Full time studies - 4 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	<i>4</i>
Duration in month	<i>0</i>
Language	<i>latvian</i>
Amount (CP)	<i>176</i>
Admission requirements (in English)	<i>In Medicine: a Master's degree in health care or an equivalent degree in medicine, dentistry, biology, biomedicine or pharmacy; In Pharmacy: a Master's degree in health care or an equivalent degree in pharmacy, chemistry, medicine, stomatology or biology, or a Master's degree of engineering in materials sciences; in Psychology: a Master's degree in psychology or a corresponding higher education diploma in social and human action sciences or health care, or social welfare, or in pedagogy education and education sciences or in humanities. An applicant who has not obtained a Master's or Bachelor's degree in psychology must additionally pass an entrance examination in the basic branches of psychology: general (cognitive) psychology; developmental psychology; personality psychology; social psychology; clinical psychology, health psychology.</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	<i>Doctor of Science (PhD) in Medicine and Health Sciences or Doctor of Science (PhD) in Social Sciences</i>
Qualification to be obtained (in english)	-

### 3.1. Indicators Describing the Study Programme

**3.1.1. Description and analysis of changes in the parameters of the study programme made since the issuance of the previous accreditation form of the study field or issuance of the study programme license, if the study programme is not included on the accreditation form of the study field, including changes planned within the evaluation procedure of the study field evaluation procedure.**

Table 1. Changes in StP parameters

No	Parameters	Description and analysis of changes to the StP parameters during the accreditation period (until 2022)	Planned changes to the evaluation procedure (after accreditation)
1.	Study direction	—	—
2.	StP title	—	—
3.	Education classification code in the Republic of Latvia	—	—
4.	Director of the StP	—	—
5.	Academic degree of the Director of the StP	—	—
6.	Aim of the StP	—	—
7.	Objectives of the StP	—	—
8.	Learning outcomes to be achieved	—	—
9.	Final examination upon the completion of the StP	—	—
10.	Type and form of study	—	—

No	Parameters	Description and analysis of changes to the StP parameters during the accreditation period (until 2022)	Planned changes to the evaluation procedure (after accreditation)
11.	Duration of implementation	—	—
12.	Language in which the study programme is implemented	—	—
13.	StP volume (CP)	—	In accordance with the amendments to Section 1(8) of the Law on Higher Education Institutions, which entered into force on 11 October 2022, the transition to the European Credit Transfer and Accumulation System will be implemented by 31 December 2024.
14.	Admission requirements	—	—
15.	Degree to be awarded	—	—
16.	Qualification to be awarded	—	—
17.	Place of implementation:	—	—

Table 1 clearly shows that there are no changes to the study programme at the moment. Since licensing, the programme has already been evaluated under the procedure "inclusion of a licensed study programme in an accredited study direction". The programme was submitted to the procedure due to the need to fulfil the commitments to the SAM 8.2.1 project<sup>[1]</sup>, which according to the explanation of the MoE in the letter of 05.10.2022 No 4-21.2e/22/2827 to RSU and the Central Financial and Contracting Agency, stipulated: "The number of supported new study programmes in the languages of the European Union that have received accreditation by the EQAR Agency - 6 study programmes" can only be confirmed by a decision issued by the Study Quality Commission on the accreditation of the study direction or a decision on the inclusion of the study programme in the accreditation sheet of the study.". Therefore, despite the fact that the whole study direction "Health Care" will undergo evaluation in 2023, RSU had to submit documents to AIKA for inclusion of the programme in the accreditation sheet of the study direction in order to receive the decision by the end of the project at the end of November 2023.



[1] The project “Reducing fragmentation of study programmes and promoting internationalisation of studies at Rīga Stradiņš University” (Second round of selection of project applications of the specific support objective 8.2.1 “Reduce fragmentation of study programmes and strengthen sharing of resources” of Project No. 8.2.1.0/18/A/014, Operational Programme “Growth and Employment” (hereinafter - SAM 8.2.1).

**3.1.2. Analysis and assessment of the study programme compliance with the study field. Analysis of the interrelation between the code of the study programme, the degree, professional qualification/professional qualification requirements or the degree and professional qualification to be acquired, the aims, objectives, learning outcomes, and the admission requirements. Description of the duration and scope of the implementation of the study programme (including different options of the study programme implementation) and evaluation of its usefulness.**

***The title of the study programme*** is the doctoral study programme “Health Care”.

The doctoral study programme “Health Care”, as the third cycle of higher education programme, combines three sub-programmes: “Medicine” (51 721), “Pharmacy” (51 725) and “Psychology” (51 313). The combination of the three study directions into one programme ensures research excellence, increases career development opportunities and prepares high quality academic staff for teaching other study directions and integrating student research into the study process. The title of the doctoral study programme “Health Care” brings together interdisciplinary research from the fields of science included in the programme, promoting the integration of interdisciplinary research methods and increasing resource efficiency.

***Qualification level to be obtained (NQF/EQF)*** – EQF/EQF level 8.

***Analysis of the study programme code and compliance with the requirements of the legislation of the Republic of Latvia***

The codes of the sub-programmes comply with the requirements of the Cabinet Regulations No 322 of 13 July 2017 “Regulations on the Latvian Classification of Education”. Each sub-programme code contains information on the level of education (the first digit of the code) and the type of education programme (the second digit of the code together with the first digit), clearly indicating that the programme corresponds to doctoral studies (doctoral degree, LQF level 8) and follows a Master's or Professional Master's degree (a condition included in the admission requirements), and the full-time duration of the programme is four years. The following digits explain the inclusion of the sub-programme in one of the defined thematic groups (the third digit), thematic areas (the fourth digit together with the third digit) and the group of education programmes (the fifth digit together with the third and fourth digits).

Sub-programme “Medicine” (51 721)

The doctoral study programme included in the thematic group Health Care and Social Welfare corresponds to the thematic area Health Care and belongs to the group of education programmes entitled “Medicine”.

Sub-programme “Pharmacy” (51 725)

The doctoral study programme included in the thematic group Health Care and Social Welfare corresponds to the thematic area Health Care and belongs to the group of education programmes

entitled "Pharmacy".

Sub-programme "Psychology" (51 313)

This doctoral study programme, which is part of the thematic group Social Sciences, Business and Law, corresponds to the athematic area Social and Human Sciences and belongs to the group of education programmes entitled "Psychology".

### ***Degree, professional qualification or degree and professional qualification to be awarded***

In compliance with the Cabinet Regulation No 595 of 27 September 2022 "Regulations on the groups, branches and sub-branches of science in Latvia", the titles of the degrees to be awarded are: the doctoral degree, Doctor of Science (Ph. D) in Medicine and Health Sciences, or the doctoral degree, Doctor of Science (Ph. D) in Social Sciences.

The doctoral StP "Health Care" corresponds to the vision and main goal defined in [RSU Strategy](#): to provide academic and innovative education based on knowledge, skills and competences for the development of science and research. The established doctoral study programme will help to further develop a strong research environment in order to more effectively implement [RSU Scientific Institution Development Strategy](#) (Latvian only) and realise scientific ambitions.

### ***The aim of the study programme***

By applying an integrated and complementary approach, which allows to solve topical tasks related to human health, train highly qualified researchers and teaching staff in the fields of health care in medicine, pharmacy and psychology in order to implement and independently manage research projects both in Latvia and internationally, as well as develop academic competence for ensuring the continuity and sustainability of education.

### ***Objectives of the study programme***

Provide doctoral students with the opportunity to acquire, in an interdisciplinary and multidisciplinary context, enhanced competences necessary for scientific research in order to carry out field-relevant, original and innovative research, to increase scientific excellence at the level of internationally citable publications.

Provide doctoral students with the opportunity to acquire competences that contribute to the dissemination of knowledge in society at national and international level and to the integration of research and academic work.

Enable doctoral students to acquire the competence to independently upgrade their scientific qualifications in order to carry out or manage research or development projects meeting international criteria at national and international level in research areas of relevance to the field.

### ***Learning outcomes to be achieved***

Taking into account a number of strategic documents mentioned in Section 2.1, the study programme has defined common learning outcomes, which have been developed with the involvement of experts in the field and education, and mapped against the study courses:

1. Analyse and interpret current scientific theories and modern research methods, complementarily integrate knowledge and competences acquired in interdisciplinary and multidisciplinary education in the implementation of original scientific projects and academic work.
2. Independently develop original research in the field, using methodologies and digital technologies appropriate to modern scientific requirements, critically evaluate the results

obtained and disseminate them through presentations at conferences and the publication of internationally cited scientific articles, thus contributing to solving problems related to human health and expanding the frontiers of knowledge and providing a new understanding of existing knowledge and its application in practice.

3. Communicate its scientific activities in the national and international scientific area, through involvement in organisations and consortia, and the communication with the general public, including academic work in the fields of medicine, pharmacy and psychology, in line with modern pedagogical developments, ensuring the integration of research and academic work.
4. Independently develop their scientific qualifications and carry out or lead research or development projects in companies, institutions, organisations that meet international criteria in their field.
5. Continuously improve communication, reasoning, cooperation, problem-solving, digital and other widely-applicable skills, which are essential for the development of interdisciplinary/multidisciplinary research.

### **Admission requirements**

1. In the sub-programme “Medicine”: Master’s degree in health care or the equivalent degree in medicine, dentistry, biology, biomedicine or pharmacy;
2. In the sub-programme “Pharmacy”: Master’s degree in health care or the equivalent degree in pharmacy, chemistry, medicine, dentistry or biology, or Master’s degree of engineering science in materials science;
3. In the sub-programme “Psychology”: Master’s degree in psychology or a corresponding higher education diploma in social sciences and human sciences or health care, or social welfare, or teacher education and education sciences or humanities.

An applicant who has not obtained a Master’s or Bachelor’s degree in psychology must additionally pass an examination in the basic branches of psychology: general (cognitive) psychology; developmental psychology; personality psychology; social psychology; clinical psychology, health psychology.

For studies in English, a minimum B2 level of proficiency in English is required.

By further specialising the outcomes listed, it is possible to relate them to each of the sub-programmes, as shown in Tables 1, 2, 3.

**Table 1. Sub-programme “Medicine” (51 721)**

Amount in credit points	176 CP (264 ECTS)
Duration of studies in years	4 years
The aim of the sub-programme	By applying an integrated and complementary approach, which allows to solve topical tasks related to human health, train highly qualified researchers and teaching staff in medicine and other fields of health care in order to implement and independently manage research projects both in Latvia and internationally, as well as develop academic competence for ensuring the continuity and sustainability of education.

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## Objectives of the sub-programme

Provide doctoral students with the opportunity to acquire, in an interdisciplinary and multidisciplinary context, enhanced competences necessary for scientific research in order to carry out field-relevant, original and innovative research in medicine, rehabilitation, dentistry and other health sciences, to increase scientific excellence at the level of internationally citable publications.

Provide doctoral students with the opportunity to acquire competences that contribute to the dissemination of knowledge in society at national and international level and to the integration of research and academic work.

Enable doctoral students to acquire the competence to independently upgrade their scientific qualifications in order to carry out or manage research or development projects meeting international criteria at national and international level in medicine, rehabilitation, dentistry and other areas of relevance to the health sciences.

Learning outcomes to be achieved in the sub-programme	<ol style="list-style-type: none"> <li>1. Analyse and explain current scientific theories and modern research methods, integrates complementarily the knowledge and competence acquired in interdisciplinary and multidisciplinary education in the implementation of original scientific projects and academic work.</li> <li>2. Independently develop original research in the field, using methodology and technologies that meet the requirements of modern science, critically evaluate the results obtained and disseminate them by preparing presentations at conferences and publishing internationally citable scientific articles, thus contributing to tackling problems related to human health and expanding the boundaries of knowledge and providing a new understanding of existing knowledge and its use in practice.</li> <li>3. Carry out scientific communication about his/her field of scientific activity in national and international scientific area, involving in organisations and consortia, as well as society as a whole, including the implementation of academic work in the fields of medicine, rehabilitation, dentistry and other fields of health sciences in accordance with the achievements of modern pedagogy, ensuring the integration of research and academic work.</li> <li>4. Independently improve their scientific qualifications and implement or lead research or development projects that meet international criteria of the field in companies, institutions, organisations.</li> <li>5. Continuously improve communication, reasoning, cooperation, problem-solving, digital and other widely-applicable skills, which are essential for the development of interdisciplinary/multidisciplinary research.</li> </ol>
Attainable degree or professional qualification:	Doctoral degree Doctor of Science (PhD) in Medicine and Health Sciences
Admission requirements	<p>Master's degree in health care or equal degree in medicine, dentistry, biology, biomedicine or pharmacy.</p> <p>For studies in English, an additional English language proficiency test.</p>

**Table 2. Sub-programme “Pharmacy” (51 725)**

Amount in credit points	176 CP (264 ECTS)
Duration of studies in years	4 years
The aim of the sub-programme	By applying an integrative and complementary approach, which allows to solve topical tasks related to human health, train highly qualified researchers and teaching staff in pharmacy to implement and independently manage research projects both in Latvia and internationally, as well as to develop academic competence to ensure the continuity and sustainability of education.
Objectives of the sub-programme	<p>Provide doctoral students with the opportunity to acquire, in an interdisciplinary and multidisciplinary context, enhanced competences necessary for scientific research in order to conduct relevant, original and innovative research in the field of pharmacy, to increase scientific excellence at the level of internationally citable publications.</p> <p>Provide doctoral students with the opportunity to acquire competences that contribute to the dissemination of knowledge in society at national and international level and to the integration of research and academic work.</p> <p>Provide doctoral students with the opportunity to acquire the competence to independently improve their scientific qualifications in order to implement or manage research or development projects meeting international criteria at national and international level in research areas relevant to pharmacy, such as the study of new dosage forms, the organisation of the circulation of medicinal products.</p>

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Learning outcomes to be achieved in the sub-programme

1. Analyse and explain current scientific theories and modern research methods, integrate complementarily the knowledge and competence acquired in interdisciplinary and multidisciplinary education in the implementation of original scientific projects and academic work.
2. Independently develop original research in the field of pharmacy, using methodology and digital technologies that meet the requirements of modern science, critically evaluate the results obtained and disseminate them by preparing presentations at conferences and publishing internationally citable scientific articles, thus contributing to tackling problems related to human health and expanding the boundaries of knowledge and providing a new understanding of existing knowledge and its use in practice.
3. Carry out scientific communication about their field of scientific activity in national and international scientific area, involving in organisations and consortia, as well as society as a whole, including the implementation of academic work in the fields of pharmacy (such as applied pharmacy, new dosage forms) in accordance with the achievements of modern pedagogy, ensuring the integration of research and academic work.
4. Independently improve their scientific qualifications and implement or lead research or development projects that meet international criteria of the field in companies, institutions, organisations.
5. Continuously improve communication, reasoning, cooperation, problem-solving, digital and other widely-applicable skills, which are essential for the development of interdisciplinary/multidisciplinary research.

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Attainable degree or professional qualification:

Doctoral degree Doctor of Science (Ph D) in Medicine and Health Sciences

Admission requirements	A Master's degree in health care or the equivalent degree in pharmacy, chemistry, medicine, dentistry or biology, or a Master's degree of engineering science in materials science; For studies in English, an additional English language proficiency test.
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**Table 3. Sub-programme "Psychology" (51 313)**

Amount in credit points	176 CP (264 ECTS)
Duration of studies in years	4
The aim of the sub-programme	By applying an integrative and complementary approach, which allows to solve topical tasks related to human health, to train highly qualified researchers and teaching staff in psychology and health psychology to implement and independently manage research projects both in Latvia and internationally, as well as to develop academic competence to ensure the continuity and sustainability of education.
Objectives of the sub-programme	Provide doctoral students with the opportunity to acquire, in an interdisciplinary and multidisciplinary context, enhanced competences necessary for scientific research in order to carry out field-relevant, original and innovative research, to increase scientific excellence at the level of internationally citable publications. Provide doctoral students with the opportunity to acquire competences that contribute to the dissemination of knowledge in society at national and international level and to the integration of research and academic work. Enable doctoral students to acquire the competence to independently upgrade their scientific qualifications in order to carry out or manage research or development projects meeting international criteria at national and international level in research areas relevant to psychology, including health psychology.



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Learning outcomes to be achieved in the sub-programme

1. Analyse and explain current scientific theories and modern research methods, integrate complementarily the knowledge and competence acquired in interdisciplinary and multidisciplinary education in the implementation of original scientific projects and academic work.
2. Independently develop original research in the field, using methodology and technologies that meet the requirements of modern science, critically evaluate the results obtained and disseminates them by preparing presentations at conferences and publishing internationally citable scientific articles, thus contributing to tackling problems related to human health and expanding the boundaries of knowledge and providing a new understanding of existing knowledge and its use in practice.
3. Carry out scientific communication about their field of scientific activity in national and international scientific area, involving in organisations and consortia, as well as society as a whole, including the implementation of academic work in the field of psychology, including health psychology in accordance with the achievements of modern pedagogy, ensuring the integration of research and academic work.
4. Independently improve their scientific qualifications and implement or lead research or development projects that meet international criteria of the field in companies, institutions, organisations.
5. Continuously improve communication, reasoning, cooperation, problem-solving, digital and other widely-applicable skills, which are essential for the development of interdisciplinary/multidisciplinary research.

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Attainable degree or professional qualification:

Doctoral degree Doctor of Science (Ph D) in Social Sciences.

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#### Admission requirements

Master's degree in psychology or a corresponding higher education diploma in social and human sciences or health care, or social welfare, or in teacher education and education sciences or in humanities.  
An applicant who has not obtained a Master's or Bachelor's degree in psychology must additionally pass an examination in the basic branches of psychology: general (cognitive) psychology; developmental psychology; personality psychology; social psychology; clinical psychology, health psychology.  
For studies in English, an additional English language proficiency test.

#### ***Assessment of Effectiveness***

The synergy of the fields/areas covered by the doctoral StP "Health Care" provides an opportunity for future lead researchers, heads of research institutions and departments to develop a holistic perspective, a biopsychosocial approach, which is declared to be the defining, central approach in public health and health care. It is the biopsychosocial approach that enables a new level of researchers and experts to shift from addressing specific problems within sectors to the challenges of an ageing population, the risks posed by Artificial Intelligence and technological developments, the complex problems of crises, and to find solutions (Health 2020: a European policy framework and strategy for the 21st century) to cope with their consequences, integrating the potential of medicine, pharmacy and clinical and health psychology into traditional biomedical and pharmaceutical models. In recent years, it has become clear that advances in biomedical and biopharmaceutical science in isolation cannot sustainably improve the health of society as a whole and the individual needs of each individual. Only targeted behavioural and social interventions, integrated with the latest findings from holistic science, can make a difference. For example, virtually all branches of medicine now have a correspondingly derived field of clinical and health psychology; psychocardiology, psychooncology and psychogeriatrics are just three examples, without which modern meaningful scientific and clinical excellence is unthinkable.

Attached:

Annex 24.1. Sample Diploma and Diploma Supplement.

Annex 24.8. Study Contract Sample.

#### **3.1.3. Economic and/ or social substantiation of the study programme, analysis of graduates' employment.**

##### ***Employment prospects of the study programme graduates***

The aim and objectives of the StP "Health Care" are closely linked to the implementation of research important to the field and the dissemination of knowledge to society, with both economic and social benefits at national and international level. Employers and graduates are involved in the development and implementation of the StP. The level of engagement starts with the StP

evaluation activity, where both employers and graduates are invited to participate in order to get to know their experiences and the application of the acquired knowledge and skills in practice.

RSU has several research platforms, one of which - **the Medical Platform** - is a knowledge centre for the RIS3 (Smart Specialisation Strategy) ecosystem in biomedicine, biopharmacy, medical technologies and biotechnologies. It provides the knowledge base for the ecosystem. The results of the Medical Platform's research are the basis for further development and quality of higher education. *The medical Platform at interdisciplinary level concentrates RSU resources to conduct world-class research and develop methods to diagnose and treat the most common diseases in the EU, with both economic and social impact.* Some examples:

- supporting for evidence-based decision-making in healthcare that promotes social equality, well-being and access to medicine, safe and effective use of medicinal products;
- advising policy makers, e.g. on optimal policy for circulation of medicinal products;
- scientific discoveries with commercialisation potential contributing to improving public health, such as new genetic tests for important causes of infertility in men and women, developing research potential in infectious diseases (*BALTINFECT* project);
- the implementation of the national research programme "Biomedicine", which includes projects on cardiovascular, autoimmune and metabolic diseases, algorithms to reduce child mortality;
- strengthening national security through research projects with the NATO Science and Technology Organisation (RSU Military Medicine Research and Study Centre) and many other research and activities.

*In order to maintain and improve the quality of the doctoral StP, mechanisms for receiving feedback from students, oral and written surveys, have been established to enable **doctoral students to participate in monitoring the quality of the study programme** - the opportunity to express opinions and suggestions on the content of study courses, methods of delivery, competences of lecturers and working style. After the survey, the Director of the study programme analyses the results of the survey and informs the head of the study direction about the results of the survey. Twice a year, the content of study courses, necessary additions and improvements are discussed at the teaching staff' meeting. Feedback on the decisions taken to improve study courses is published on the Student portal. Subsequently, once a year, the Dean reports to the Council of Deans on the survey results and the decisions taken and the necessary changes in the implementation of the study programme. The survey results are also discussed each semester at the Study Quality Council, where improvement measures are decided, such as the topics to be covered or the way they are presented in the research methodology courses. A new questionnaire has been developed to improve the survey, which has also been agreed with the Student Council, and is available for completion from the spring semester 2022.*

Graduates are invited to participate in the evaluation of the quality of the study programme in order to identify their experiences and the application of the acquired knowledge and skills in practice.

Various forms of cooperation with employers and industry are being pursued to ensure **the quality of the study content and its relevance to the current needs of the labour market:**

- **The sub-programme "Medicine":** the sub-programme promotes the principles of intersectoral mobility, identifies strategic partners, and increases cooperation with private medical institutions and industry. At present, cooperation with the following private medical institutions and companies is ongoing: Digestive Diseases Centre "Gastro", Health Centre 4, E. Gulbja Laboratory, Dental Practice of Iveta Abola and Dace Rakicka, "Amberdent" Dental Clinic and Laboratory, Dermatology Clinic, Latvian Microsurgery Centre and JSC "Health

Centre Association".

- **The sub-programme “Pharmacy”:** employers are invited to the Career Opportunities Week, Open Days and contracts are concluded for the provision of placement. Cooperation agreements with pharmacies, pharmacy chains and manufacturers of medicinal products. Doctoral students work on their research projects mainly in the departments of RSU Faculty of Pharmacy, as well as in collaboration with the Latvian Institute of Organic Synthesis (LIOS) and the Latvian Biomedical Research and Study Centre (BMC). Doctoral students are also involved in the Latvian Council of Science Fundamental and Applied Research Projects (LCS FARP) and Baltic Biomaterials Centre of Excellence (BBCE) projects (information in [Latvian](#) and [English](#)), as well as use the educational and training opportunities offered by the projects.
- **The sub-programme “Psychology”:** cooperation with employers and professional organisations is carried out both in terms of research data collection and feedback on results, as well as in seminars and conferences. For example, 12 professional associations were involved in the research topic “Social perceptions of mental health professionals on psychological support practices in Latvia”. Three directors of professional associations are studying in the study programme, two are participating in the boards of professional associations. Cooperation with employers and professional organisations is facilitated by the study of interesting topics such as "Self-regulation skills and sense of success of men working in organisations in Latvia at different ages", "Professional identity as a framework for the development of a civic society for psychological support providers".

### ***Analysis of graduate employability***

Analysing the last 3 years of doctoral degree holders in medicine and pharmacy, a total of 38 *dr.med* and *dr.pharm*, 26 colleagues (~68%) are actively working as RSU academic staff, 2 of whom are elected as assistant professors in their respective departments. One of the doctoral degree holders coordinates the Latvian [SHARE](#) project. One of the colleagues is the head of the cardiology clinic at RAKUS, who is active in organising international continuing education courses. One of the colleagues has been recognised for her professional skills by being elected as the head of the Latvian Association of Ophthalmologists. Three colleagues have chosen to continue their careers in clinics abroad, while five doctoral degree holders work in private laboratories or medical institutions.

#### **3.1.4. Statistical data on the students of the respective study programme, the dynamics of the number of the students, and the factors affecting the changes to the number of the students. The analysis shall be broken down into different study forms, types, and languages.**

The implementation of the doctoral StP “Health Care” started on 3 October 2022 with the enrolment of students for the 1st year of study of the academic year 2022/2023 in both English and Latvian language streams. 39 students were enrolled in the Latvian stream (31 in the sub-programme “Medicine”, 4 in the sub-programme “Pharmacy”, 4 in the sub-programme “Psychology”) and 1 in the English stream (in the field of Medicine). There are no international students in the sub-programmes "Pharmacy" and "Psychology". As the StP was recently licensed, the English stream had not been announced yet, but there are plans to announce it in the future.

Students from the previous doctoral StPs “Medicine” and “Pharmacy” were transferred to the

doctoral study programme "Health Care". A total of 84 students were transferred (5 in the sub-programme "Pharmacy", 79 in the sub-programme "Medicine"). The students (4 students in total) of the doctoral StP "Psychology" were not transferred to the doctoral StP "Health Care" but continue their studies in their previous programme. No new students are admitted to the three-year doctoral StP "Psychology" from the academic year 2022/2023.

When assessing **the dynamics of the number of students** enrolled in the previously implemented sub-programmes as programmes, it can be seen that in the period from the academic year 2016/2017 to the academic year 2020/2021 the overall enrolment can be assessed as **stable**: the number of students enrolled in the sub-programme "Medicine" was between 30 and 34 throughout the reporting period, in the sub-programme "Pharmacy" between 3 and 4 and in the sub-programme "Psychology" (starting with the implementation of the programme in the academic year 2017/2018) between 2 and 8. In the sub-programme "Medicine", one international student from Lithuania studied full-time (non-exchange) in the period from the academic year 2016/2017 to the academic year 2018/2019.

The analysis of **the number of graduates** also shows **stability**, i.e., 19-25 doctoral students graduate from the sub-programme "Medicine" each year (the highest number was in the academic year 2019/2020), 1-3 students graduate from the sub-programme "Pharmacy" and 2 graduates from the sub-programme "Psychology".

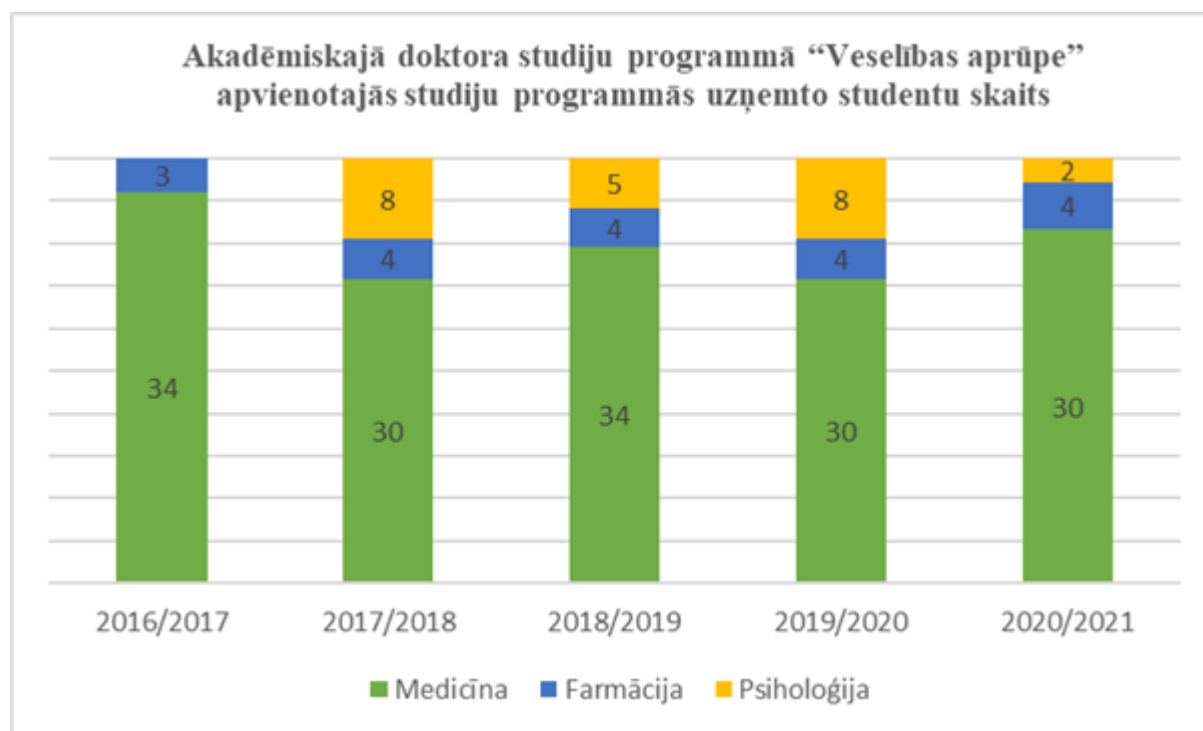


Figure 1. Dynamics of the Number of Students Enrolled in the Previously Implemented Sub-programmes.

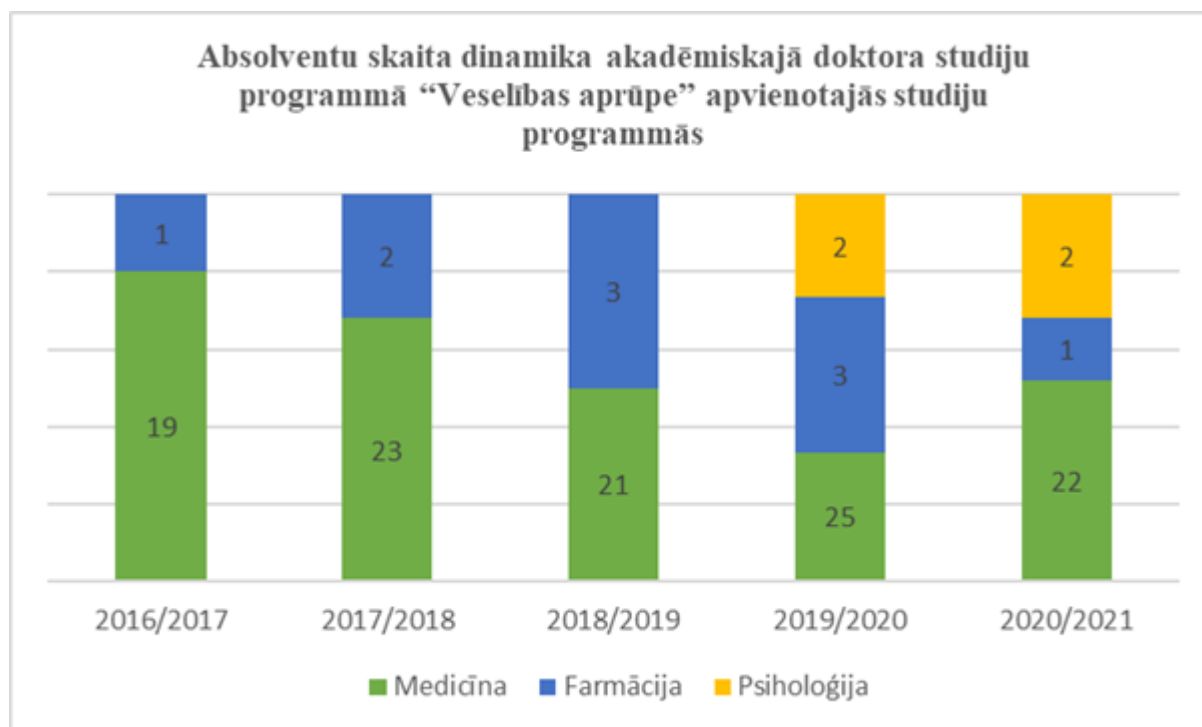


Figure 2. Dynamics of the Drop-out rate in the Previously Implemented Sub-programmes.

When analysing the drop-out rate, it can be concluded that the majority of students leave their studies in the 3rd or final year of study. The majority of students leave their studies of their own free will and do not resume their studies after an academic leave. In rare cases, the reason for dropping out is failure to succeed. Socio-economic conditions and financial burden are the most common reasons for dropping out for fee-paying students.

To promote **intersectoral mobility**, RSU has signed cooperation agreements with clinics abroad and in Latvia. To promote international mobility and improve their qualifications, doctoral students have the opportunity to further their knowledge with foreign visiting professors; doctoral study grants provide funding for mobility. In addition to these activities, doctoral students are involved in research projects and networks implemented by RSU and cooperation partners. A summary of the mobility opportunities offered is available on RSU website (information in [Latvian](#) and [English](#)).

To promote **international mobility and research development** at RSU, Erasmus+ projects have been established. In the study direction "Health Care", Erasmus+ cooperation agreements for the exchange of students and staff have been concluded with 45 universities in various European countries (Austria, Belgium, Czech Republic, Denmark, Estonia, Germany, France, Lithuania, Poland, Slovenia, Spain, etc.) until the end of 2027. Students can also exchange placements with institutions without cooperation agreements. RSU staff can go on exchange to institutions without cooperation agreements, as well as to all partner universities of the study direction "Health Care" (detailed information on Erasmus + cooperation agreements in the study direction "Health Care" is given in Annex 7). In March 2022, an Erasmus+ project application *"JOIN IT: Peer-to-peer support to build social connection and wellbeing"* (KA220-YOU - Cooperation partnerships in youth) was prepared, in which RSU as a partner organisation participates in the project together with universities of Italy, Spain, Germany and Croatia. The aim of the project is to identify solutions and resources to reduce social isolation and loneliness of young Europeans (19-25 years old).

An important opportunity for doctoral students to engage in mobility and contribute to the implementation of the scientific programme is the **participation in COST Actions**, which are recognised as scientifically innovative, and aim at supporting early-stage researchers to cooperate with leading institutions and research groups. RSU doctoral students are participating in 24 COST

Actions, namely in the *Cost Action PhysAgeNet* working group with the aim to identify biomarkers of physical activity (product - systematic review), to create a database of these markers (product - *open source* database) and to develop guidelines for intervention studies and sampling in physical activity studies using technology (planned products: two systematic reviews and guidelines).

Statistics on student mobility in the doctoral study sub-programmes of the study direction "Health Care" show that on average, one to three students take advantage of mobility opportunities per academic year. **Outgoing student mobility** data:

- In the academic year 2016/2017, one student of the **sub-programme "Medicine"** took part in an Erasmus placement mobility at the University of Tartu in Estonia. In the academic year 2017/2018, three students took advantage of Erasmus mobility opportunities and were at universities in Sweden, Germany and Estonia. In the academic year 2019/2020, one student was in the United Kingdom on an Erasmus placement mobility, and in the academic year 2021/2022, one Erasmus graduate placement mobility was to Aalto University in Finland
- **the sub-programme "Pharmacy"** has an average of one Erasmus mobility each year: Italy in the academic year 2016/2017 and 2020/2021, France in the academic year 2019/2020.
- **in the sub-programme "Psychology"**, Erasmus placement mobility opportunities were taken by 3 students in the academic year 2018/2019, going to Lithuania (Vytautas Magnus University and Palliative Care Centre "Prasme").

**Incoming mobility** of students in the doctoral study sub-programme "Psychology": In the academic year 2019/2020, one student from Klaipeda University in Lithuania participated in the Erasmus placement mobility. At least one doctoral student per year in the sub-programme "Psychology" has the opportunity for international mobility. International mobility has increased by 100% over three years.

In addition, grants for young researchers to attend conferences are available (facilitates networking). Doctoral student mobility within the doctoral grant for studies:

- **Sub-programme "Medicine":**
  - In 2016, 22 doctoral students used their doctoral grant to participate in international conferences in the following countries: Finland, Turkey, Brazil, the Netherlands, Austria, Italy, UK, the USA, Spain, the Czech Republic, Germany, the United Arab Emirates.
  - In 2017, 17 doctoral students participated in international conferences in the following countries using a doctoral grant: Austria, Switzerland, Latvia, France, Philippines, Italy, UK, USA, Lithuania, Serbia, China, the Netherlands, Spain, Estonia, Russia.
  - In 2018, 28 doctoral students used their doctoral grant to attend international conferences in the following countries: Spain, Lithuania, France, Iceland, Denmark, Portugal, Belgium, Austria, Georgia, Czech Republic, Ireland, Malaysia, USA, Netherlands, Slovenia, Greece, Thailand, Sweden.
  - In 2019, six doctoral students used their doctoral grants to attend international conferences in the following countries: Poland, Switzerland, France, Canada, Germany.
  - In 2020, one doctoral student used a doctoral grant to attend an international conference in France.
- **Sub-programme "Pharmacy":**
  - In 2016, three doctoral students used a doctoral grant to attend international conferences in Greece and France.
  - In 2017, one doctoral student used a doctoral grant to attend an international conference in Sweden.
  - In 2018, six doctoral students used their doctoral grants to attend international conferences in the following countries: Finland, Poland, Czech Republic, Japan, UK,

Ireland.

- No doctoral students from **the sub-programme “Psychology”** used their doctoral study grant to attend international conferences.

Student **mobility within the doctoral study grant** has decreased after 2019 due to various COVID-19 restrictions and students not choosing to attend international conferences in person, but instead attending webinars organised by international conferences without using the doctoral study grant. There are several challenges to student mobility, the most significant of which are related to family circumstances as well as work, e.g. for those doctoral students who are practising as specialists in their field (e.g. have their own practice), it is problematic to temporarily stop providing services to their clients/patients.

The experience gained during inbound and outbound mobility is recognised through the validation of the study programme content.

Attached:

Annex 16. Statistical data on students.

### **3.1.5. Substantiation of the development of the joint study programme and description and evaluation of the choice of partner universities, including information on the development and implementation of the joint study programme (if applicable).**

## **3.2. The Content of Studies and Implementation Thereof**

### **3.2.1. Analysis of the content of the study programme. Assessment of the interrelation between the information included in the study courses/ modules, the intended learning outcomes, the set aims and other indicators with the aims of the study course/ module and the aims and intended outcomes of the study programme. Assessment of the relevance of the content of the study courses/ modules and compliance with the needs of the relevant industry, labour market and with the trends in science on how and whether the content of the study courses/ modules is updated in line with the development trends of the relevant industry, labour market, and science.**

In accordance with the [Cabinet of Ministers Order No 345 “On the Conceptual Report “On the Introduction of a New Doctoral Education Model in Latvia”](#) (Latvian only), the study programme has been developed for 4 years and out of the total 176 CP (264 ECTS) during the study period, 78% (138 CP / 207 ECTS) is research, while 22% (38 CP / 57 ECTS) is study courses, knowledge dissemination, pedagogy and research mobility.

The study plan consists of three essential components: the compulsory study courses: the part of scientific research, the compulsory part of studies, and the elective study courses. The scientific research part includes writing of the doctoral thesis, pedagogical work and knowledge dissemination, as well as seminars for doctoral students (methodology and methods for writing the



doctoral thesis and doctoral thesis production) and is the most important part of the study process (78 %). The compulsory part of the study programme, or Part A study courses, consists of five core courses ('Methodology of Scientific Activity', 'Health Care and Research Ethics', 'Learning and Teaching in Higher Education and Science Area', 'Philosophy and Logic of Science' and 'Scientific Writing and Scientific Communication') and two dissertation examinations - in the field and in a foreign language. Whereas, in the elective part of the programme (Part B and Part C courses), restricted elective and elective courses are offered (indicatively 7 % of the programme).

The mapping of the doctoral StP and study courses shows that the StP and study courses meet EQF/LQF level 8 and the requirements set out in the legislation and provide a student-centred approach. The mapping results show the interrelationship between the information contained in the study courses, the stated aim and the expected outcomes, and the relationship between the aims of the study courses and the aim and expected outcomes of the StP. Each of the study courses aims to achieve 2-4 outcomes defined for the study programme, thus fulfilling the aim of the study programme.

The implementation of the doctoral study programme is based on a set of programme management and related organisational arrangements for the delivery of the StP. During their studies, doctoral students have the opportunity to discuss matters with lecturers and fellow students both face-to-face and remotely using technology. One of the purposes of the study programme is to focus on the need for each student as an individual to be able to express his/her creative and innovative potential, which is a crucial added value for the future researcher and/or professional in the field. The didactic concept of the study programme is oriented towards the greatest possible involvement of doctoral students in the study process by offering activities that promote individual and group performance of doctoral students (e.g. by participating in the organisation of conferences), presentations and discussions on current research and theory issues of the doctoral thesis topic (e.g. by attending seminars for doctoral students), participation in conferences and preparation of scientific publications, as well as dissemination of knowledge.

Doctoral studies at RSU are organised in accordance with the Academic Regulations for Doctoral Studies, which stipulate that doctoral studies are the independent work of a doctoral student supervised by a doctoral thesis supervisor and academic staff in order to obtain a doctoral degree.

The learning outcomes are achieved by creating an intellectually stimulating research environment, organising study courses and other events (conferences, symposia) with the participation of the teaching staff from RSU and other higher education institutions; providing doctoral students with access to the necessary literature and methodological materials; offering the opportunity to participate in research programmes; facilitating cooperation between doctoral students to exchange their knowledge and experience; providing opportunities to teach study courses in Bachelor and Master level programmes; providing opportunities to gain international experience by participating in conferences, publishing articles in academic journals, as well as by attracting international visiting lecturers. A visiting lecturer course is planned to support mobility and internationalisation. It will be possible to get credit points for elective study courses for participation in local and international research projects, thus gaining experience and developing networks for a successful future career in science.

The aim of the **compulsory part** (Part A) courses is to broaden and deepen the research and academic competences of doctoral students and to foster interdisciplinary dialogue, in line with the stated objectives and outcomes of the study programme. These are:

- Doctoral examination in a foreign language (2 CP / 3 ECTS) and doctoral examination in a discipline (2 CP / 3 ECTS)
- Philosophy and Logic of Science (2 CP / 3 ECTS)

- Methodology of Scientific Activity (2 CP / 3 ECTS)
- Healthcare and Research Ethics (2 KP / 3 ECTS)
- Scientific Writing and Scientific Communication (2 KP / 3 ECTS)
- Pedagogy of a Higher Education Institution (2 CP/3 ECTS)
- Seminars for Doctoral Students (4 CP / 6 ECTS)
- Dissemination of Knowledge and Pedagogical Work (8 CP / 12 ECTS)
- Scientific Research Paper (138 CP / 207ECTS)

Doctoral seminars are particularly important because students spend a lot of time independently reading, searching and gathering information, and preparing a presentation in order to participate in discussions, exchange of opinion and peer-to-peer evaluation in face-to-face/online sessions thus developing their cooperation, communication feedback, reflection and other transversal skills for which interaction/socialisation is important. Other Latvian scholars and opinion leaders, as well as international experts will be involved in the work of doctoral seminars.

The student obtains the largest number of credit points for their scientific research work (138 CP / 207 ECTS). The content of this course consists of original scientific research carried out independently by the doctoral student in cooperation with and under the supervision of the doctoral thesis supervisor. This course is conducted in accordance with the plan of the Doctoral study programme, which is drawn up by the doctoral student together with their doctoral thesis supervisor for each academic year. The study course "Dissemination of Knowledge and Pedagogical Work" develops the doctoral student's competence to share knowledge with others - students of Bachelor's and Master's study programmes, local and foreign colleagues. The doctoral student may carry out the pedagogical work at their workplace or at the RSU department where the supervisor of the doctoral thesis works. The involvement of RSU doctoral students in teaching will also contribute to the generational change of teaching staff. Records corresponding to the completed teaching work are made in the respective Doctoral Student's Book, and credit points are granted on this basis. In particular, the awarding of credit points for scientific research work, dissemination of knowledge and teaching work is determined by a Committee established by RSU Rector's Decree (see the section "Progress analysis" below).

Students take a doctoral examination in medicine, pharmacy or psychology, **according to the sub-programme** and scientific discipline **chosen**.

It should be noted that for medical students who have obtained a medical practitioner's certificate in the sub-discipline in which the research is carried out, the certificate is equivalent to a doctoral examination in the field. A valid internationally recognised language certificate, e.g. *TOEIC*, *TOEFL* or *IELTS* in English; *DaF* test according to the language proficiency level C1 (*Common European Framework of Reference for Language Learning and Teaching*) in German; *DALF* test according to the language proficiency level C1 (*Common European Framework of Reference for Language Learning and Teaching*) in French is also equivalent to the doctoral examination in a foreign language:

**Restricted elective study courses** implement the variable sub-programme part of the study programme (Part B courses). It is even more focused on the specificities of individual research work. Credit points for restricted elective courses can also be obtained for participation in national or international research projects, thus developing networking and collaboration competences for a successful future career in science.

**Elective study courses** (Part C course) include both very narrow specialisation courses in the required sub-field of science, Vertically Integrated Projects and study courses at another accredited

higher education institution of Latvia (which has obtained a licence for doctoral StP), for developing skills relevant to the labour market, skills in entrepreneurship, communication psychology skills and others. These courses also include visiting lecturer courses to implement mobility and internationalisation.

The purpose of the elective courses is to enable each doctoral student to acquire specific knowledge, skills and competences in order to work independently and in collaboration with his/her supervisor(s) to contribute to the development of the doctoral thesis. During the elective part of studies, the doctoral student must complete a total of 12 CP / 18 ECTS, of which a maximum of 4 CP / 6 ECTS are elective courses.

As the topic of each doctoral student's research work is usually specific, no modules are set for the doctoral StP "Health Care" **in order to preserve the possibility for the doctoral student to design his/her individual study programme according to the topic of the doctoral thesis.** At the same time, in order to facilitate the choice of young scientists to develop in their chosen field of research, elective study courses in Medicine, Pharmacy and Psychology have been created, with a total of 8 CP / 12 ECTS (see Table 5). However, in accordance with the principle of individual planning mentioned above, the content of the programme is chosen in accordance with the topic of the doctoral thesis, i.e. in a specific way. **Research excellence, taking into consideration the Salzburg Principles and Recommendations, implies an individual path for the doctoral student in an open research environment and mobility, therefore the doctoral StP "Health Care", as mentioned above, foresees a clearly defined individual study plan, drawn up by the student together with the doctoral thesis supervisor and RSU Department of Doctoral Studies.**

Table 5. Elective part of studies - modules in Medicine, Pharmacy and Psychology

Restricted elective course module "Medicine"	Restricted elective course module "Pharmacy"	Restricted elective course module "Psychology"
Epidemiology, Part 1, 2 CP / 3 ECTS	Big Data in Biomedicine, 2 CP / 3 ECTS	Multivariate Statistics and Modelling in Psychology I, 2 CP / 3 ECTS
Information Literacy in Science, 2 CP / 3 ECTS	Writing of Scientific Papers / Scientific Language, 2 CP / 3 ECTS	Contemporary Trends in Psychology and Interdisciplinary Approach in the Context of Healthcare I, 2 CP / 3 ECTS
Mathematical Statistical Methods in Health Sciences II, 2 CP / 3 ECTS	Information Literacy in Science, 2 CP / 3 ECTS	Qualitative Research Methods I, 2 CP / 3 ECTS
Mathematical Statistical Methods in Health Sciences II, 2 CP / 3 ECTS	Mathematical Statistical Methods in Health Sciences I, 2 CP / 3 ECTS	Qualitative Research Methods II, 2 CP / 3 ECTS
<b>8 CP / 12 ECTS</b>	<b>8 CP / 12 ECTS</b>	<b>8 CP / 12 ECTS</b>

At the end of each academic year, doctoral students prepare a progress report on scientific activity, which is an essential part of the study programme. RSU Department of Doctoral Studies organises a

Committee for Research Progress Review, which traditionally consists of the Dean of the Department of Doctoral Studies, managers of the relevant field, as well as active researchers from several sub-fields. The composition of the Committee is established by RSU Rector's Decree. The progress report on scientific activity develops both the ability to debate, argue as well as focus, identify weaknesses in research methodology and make targeted changes to the research design. Progress indicators are evaluated by a pass or fail; if the supervisor of the planned doctoral thesis is also a member of the Committee, he/she does not assess his/her doctoral student's work.

Doctoral students' activities are not only focused on new discoveries and knowledge creation, but also on the application of the knowledge gained in the development and education of society, including:

- Doctoral students are involved in the development of RSU research directions, both by developing relevant doctoral theses and by preparing scientific publications, for example, three doctoral students of the sub-programme "Psychology" are acting research assistants in the Department of Health Psychology and Pedagogy Doctoral students of the Pharmacy sub-programme are involved in the Baltic Biomaterials Centre of Excellence (BBCE) project, the Latvian Council of Science and Fundamental and Applied Research and the Rural Support Service project. Doctoral students of the sub-programme Medicine were actively involved in providing evidence-based information to the media during the Covid-19 pandemic on adolescent mental health, mental health indicators of medical staff and public health indicators in general. Several new project proposals have been prepared involving doctoral students.
- During their studies, doctoral students are each working on their own doctoral thesis research in one of the areas covered by the Cabinet Regulations No 595 (27.09. 2022.) "Regulations on the Groups, Branches and Sub-Branches of Latvian Science"<sup>11</sup> and prepare publications on the topic of the doctoral thesis, which must be indexed in one of the international databases (ERIH+, Scopus or Web of Science (the requirement is specified in the Academic Regulations for Doctoral Studies)).
- During the studies, a doctoral student is involved in the study process by carrying out pedagogical work in one of RSU departments or outside RSU in one of the higher education institutions of Latvia, for example, assisting or conducting study courses (lectures, classes, laboratory works) for Bachelor students, supervising Bachelor's or Master's theses as theses supervisors, developing course descriptions, etc. The study course "Pedagogical Work" sets out the assessment criteria that doctoral students must follow to get the doctoral student's teaching activity validated within the study process. For example, in the sub-programme "Psychology", a working group has been set up, involving two Master's students and the doctoral thesis supervisor, to develop the research issues in relation to the topic of professional identity development, and the doctoral student also covers this topic in his/her professional activity course. In the sub-programme "Pharmacy", doctoral students are involved in the work of departments and conduct classes in Inorganic Chemistry, Pharmacogenetics, Medicinal Chemistry, Practical Pharmacy, Clinical Pharmacy, Pharmacology, Analysis of Clinical Trials, as well as supervise the research work of students in the undergraduate programme. Also in the sub-programme "Medicine", students are actively involved in improving the knowledge and competences of RSU students, e.g. 49% of the doctoral students enrolled in 2021 work as teaching staff: two of them work in the Department of Otorhinolaryngology, five in the Department of Internal Medicine, two in the Department of Paediatrics, one in the Department of Neurology, three in the Department of Biology and Microbiology, one in the Faculty of Rehabilitation, one in the Institute of History

of Medicine, two in the Department of Human Physiology and Biochemistry, one in the Department of Psychiatry and Narcology, one in RSU Department of Rehabilitation, while one colleague is the head of RSU Laboratory of Anatomy.

- Doctoral students have the opportunity to apply for the doctoral study grant (information in [Latvian](#) and [English](#)) and to receive support for their scientific work, research and publication. In the academic year 2020/2021, the following grants were received: 53 doctoral students in the sub-programme “Medicine”, 10 doctoral students in the sub-programme “Pharmacy” and three doctoral students in the sub-programme “Psychology”, while in the academic year 2021/2022, 59 doctoral students were awarded the grant in the sub-programme “Medicine”, seven doctoral students in the sub-programme “Pharmacy” and three doctoral students in the sub-programme “Psychology”.
- Doctoral students have the opportunity to participate in mobility programmes thus getting information for their doctoral theses (see Section 3.1.4 for more information on mobility).
- Doctoral students are involved in the organisation of RSU conferences. All RSU activities are reflected in the events calendar (information in [Latvian](#) and [English](#)). RSU organises a biennial international conference where doctoral students participate with a poster presentation or oral presentation on the achievements of their doctoral research. For example, from 21 to 23 April 2022, RSU organised the 8th international scientific practical conference “Health and Personal Development: an Interdisciplinary Approach” (information in [Latvian](#) and [English](#)). The sub-programme “Psychology”: doctoral students are involved in the annual international conference *Society. Integration. Education*; in drawing up the collection of articles “Psychology”, which is also indexed in *Web of Science*.

The aim of the Doctoral StP is to create a close synergy between research and studies, allowing to involve students not only in research but also in the work of a scientific organisation, thereby developing the ability to contribute to the development of healthcare sectors by conducting substantial original research, also at the level of international peer-reviewed publications.

Attached:

Annex 17.1. Compliance of the study programme with the national education standard.

Annex 17.2. Compliance of the study programme with the specific regulatory framework in the field.

Annex 18.2. Compliance of the qualification obtained in the study programme with the occupational standard

Annex 19. Study programme plan (for each type and form of the study programme).

Annex 20. Study course descriptions.

Annex 18.1. Mapping of study courses for the achievement of learning outcomes of the study programme

**3.2.2. In the case of master’s and doctoral study programmes, specify and provide the justification as to whether the degrees are awarded in view of the developments and findings in the field of science or artistic creation. In the case of a doctoral study programme, provide a description of the main research roadmaps and the impact of the study programme on research and other education levels (if applicable).**

The main research areas of the Doctoral StP 'Health Care' are: clinical medicine, basic medical sciences, including pharmacy, medical biotechnology, health and sports sciences, forensic medicine and psychology. All research areas for obtaining a doctoral degree (PhD) correspond to the groups of fields of science as defined by the Cabinet of Ministers.

The entire study process in the doctoral study programme is based on scientific research and scientific contribution in the relevant field of science, and is closely linked to the fulfilment of the requirements for the start of the doctoral dissertation, e.g. two international publications are required to complete the doctoral study programme and start the doctoral dissertation process. These conditions are described in both the Academic Regulations for Doctoral Studies and the Regulations on the Operation of Promotion Councils and Promotion Procedures.

The Academic Regulations for Doctoral Studies, approved by RSU Senate on 20.09.2022, Minutes No 2-S-1/7/2022, contains the following requirements for doctoral students regarding publications:

- In order to recognise **the four-year** doctoral study programme as successfully completed, the doctoral student must have completed all the courses required for the doctoral study programme and must have carried out research activity during the doctoral studies (related to the topic of the doctoral thesis), which meets at least one of the following criteria:
- **Two double-blind peer-reviewed scientific publications** in scholarly journals or conference proceedings indexed in *SCOPUS* or *Web of Science* database, or included in the *ERIX+* database;
- **One double-blind peer-reviewed scientific publication** in a scholarly journal or conference proceedings indexed in *SCOPUS* or *Web of Science* database, or included in the *ERIX+* database and **a peer-reviewed scientific monograph** on one research topic or problem, and containing a bibliography.

The new Academic Regulations for Doctoral Studies have been adapted to the requirements of the new doctoral StP "Health Care" (*the current version of the Academic Regulations for Doctoral Studies is available [here](#)*).

**3.2.3. Assessment of the study programme including the study course/ module implementation methods by indicating what the methods are, and how they contribute to the achievement of the learning outcomes of the study courses and the aims of the study programme. In the case of a joint study programme, or in case the study programme is implemented in a foreign language or in the form of distance learning, describe in detail the methods used to deliver such a study programme. Provide an explanation of how the student-centred principles are taken into account in the implementation of the study process.**

The mapping process of the study programme as part of the study programme management process has been carried out during the programme development process, facilitating the possibility of a student-centred approach. The sequence of study courses in the implementation of the study programme is needs-based and ensures sequential learning, peer discussion and practical application of knowledge. Each study course has clearly defined aim and learning outcomes, which are formulated according to the level of complexity and correspond to LQF level 8 (see Annex 18.1).

The implementation of the courses follows the principles of student-centred education:

1. The diversity of doctoral students' needs is taken into account and respected by designing appropriate learning pathways. For example, each study course contains the information a doctoral student needs to produce research for the doctoral thesis, write the doctoral thesis, produce a scientific article on the research topic of the doctoral thesis. Each course includes not only active learning with the course lecturer in lectures and classes, peer discussion and information exchange, but also a reading list containing in-depth information on the topics covered in the course. The doctoral programme is delivered exclusively by experienced, highly competent teaching staff and by top experts in their field on specific topics of interest to doctoral students, both in doctoral seminars (e.g. "*Predatory journals*", how to write a perfect abstract, how to write a successful proposal for a scientific project, etc.) where the content and the inspiration of the lecturer are crucial.
2. Different ways of delivering the programmes are taken into account and used according to the possibilities. For example, in mathematical statistics, doctoral students are divided into groups by questionnaire, both on the basis of knowledge and on the basis of the use of more demanding statistical methods. To promote integrity, study courses for both Latvian and English language students are, as far as possible, implemented jointly (for example, the study course "Big Data in Biomedicine" was implemented jointly for both language streams in the spring semester of 2023). Taking into account the recommendation of doctoral students to implement courses remotely, as many doctoral students live or work in different towns of Latvia or abroad, are abroad within the framework of cooperation projects, study courses are implemented remotely or in a hybrid way, giving the possibility to attend a course remotely if it is not possible to attend the course in person. Part A study courses are jointly implemented for all sub-programmes, giving doctoral students the opportunity to get to know the specifics of research methods in other sub-fields of science, share experience, listen to suggestions, and promote interdisciplinary cooperation.
3. A variety of pedagogical methods are used as appropriate. For example, lectures, classes, video lectures, discussion groups, individual study of the topic using the bibliography appropriate to the course and discussion after the topic has been studied. Taking into account the aim and assessment criteria of each study course, it should be noted that for most of the study courses, the assessment criteria include active participation of the doctoral student in the course lectures and classes, with the possibility to present the acquired knowledge at the end of the course directly relevant to his/her doctoral thesis research (e.g. the study course "Methodology of Scientific Activity", "Scientific Communication and Scientific Writing", "Health Care and Research Ethics"). In other courses, the end-of-course examination takes the form of a test or examination, where the doctoral student answers a set number of questions corresponding to the topic of the course and receives assessment according to the higher-level thinking skills demonstrated. (for example, "Epidemiology", "Civil Defence and Environmental Protection").
4. The student strive for independence is encouraged, while providing guidance and support from the teaching staff at the same time. For example, during the doctoral studies, each doctoral student receives a concentrated set of information necessary for the development of the doctoral thesis and for the preparation and publication of articles. In addition to the study courses, the study programme also provides for the doctoral student's individual work in the development of the doctoral thesis under the supervision of the doctoral thesis supervisor and offers support for young scientists from a wide range of RSU departments: Research Department, Department for Doctoral Studies, Doctoral School, Statistics Unit, networking events, Library, etc. (support opportunities are summarised on RSU website: <https://www.rsu.lv/en/research>).
5. Mutual respect between the student and the teacher is promoted. For example, each doctoral student is given the opportunity not only to communicate with the course lecturer during the

course, but also to communicate with the course lecturer outside the course. The teaching staff involved in the implementation of the study programme support doctoral students in both the course completion and the research work. The study programme involves doctoral students in pedagogical work, thus enabling them to develop their teaching skills, gain an understanding of the study course design and implementation, and gain experience of the teaching-learning relationship, thus fostering mutual respect in their relationship as both the student and the lecturer.

6. Appropriate procedures are in place to deal with student complaints. For example, at the end of each study course, the doctoral student completes the course evaluation questionnaire in which he/she expresses his/her thoughts on the implementation of the course, points out shortcomings and makes suggestions for improving the implementation of the course. Whereas, [the Academic Regulations for Doctoral Studies](#) contain information on how to handle appeals.

Attached:

Annex 18.1. Mapping of study courses for the achievement of learning outcomes of the study programme

**3.2.4. If the study programme envisages an internship, describe the internship opportunities offered to students, provision and work organization, including whether the higher education institution/ college helps students to find an internship place. If the study programme is implemented in a foreign language, provide information on how internship opportunities are provided in a foreign language, including for foreign students. To provide analysis and evaluation of the connection of the tasks set for students during the internship included in the study programme with the learning outcomes of the study programme (if applicable).**

**3.2.5. Evaluation and description of the promotion opportunities and the promotion process provided to the students of the doctoral study programme (if applicable).**

The following can be considered as the contribution and achievements in each group of sciences, in which a doctoral degree is being awarded (Ph D): the innovative research (doctoral thesis), the publications of the doctoral student on the topic of the doctoral thesis (e.g. scientific articles, collection of publications, monograph) and the patents related to the thesis research. Completion of an appropriate doctoral study programme and publications are among the conditions for starting the doctoral promotion process.

The Regulations on the Operation of Promotion Councils and on the Procedure for Doctoral Promotion lay down a number of requirements for publications and for starting a doctoral promotion process to obtain the degree. To start the doctoral promotion process, the Applicant shall submit the following to RSU Department of Doctoral Studies:

- A certificate from the higher education institution on completion of the doctoral study programme or, if the Applicant has not completed a relevant programme, - on passing



examinations in the chosen field, sub-field and foreign language;

- A list of scientific publications reflecting the progress and results of the doctoral thesis and copies of the most relevant publications:
- if the thesis is a dissertation, at least two anonymously peer-reviewed international publications;
- if the thesis is a thematically coherent body of scientific publications, at least four anonymously peer-reviewed international publications;
- if the thesis is a scientific monograph, at least one anonymously peer-reviewed international publication.

The publications must be anonymously peer-reviewed in a scientific journal or conference proceedings indexed in *SCOPUS*, *Web of Science* or *ERIH+* database. More information on the doctoral promotion on RSU website in ([Latvian](#) and [English](#)). The current Regulations on the Operation of Promotion Councils and on the Procedure for Doctoral Promotion are available in [Latvian](#).

### **3.2.6. Analysis and assessment of the topics of the final theses of the students, their relevance in the respective field, including the labour market, and the marks of the final theses.**

The interrelation and interaction of medicine and psychology in doctoral research topics in a multidisciplinary approach is clearly demonstrated by the examples of doctoral thesis topics: "Spiritual practices and experiences as resources or threats for self-help for oncology patients during chemotherapy" (Psychology/Medicine) as well as the fact that theses are often supervised by representatives of both disciplines. This makes a significant contribution not only to the research processes, but also to the implementation of the results of research projects into the labour market. For more information about students' final theses see Annex 22.

Attached:

Annex 22. Topics of the students' final theses.

## **3.3. Resources and Provision of the Study Programme**

### **3.3.1. Assessment of the compliance of the resources and provision (study provision, scientific support (if applicable), informative provision (including libraries), material and technical provision, and financial provision) with the conditions for the implementation of the study programme and the learning outcomes to be achieved by providing the respective examples.**

#### **Assessment of the study and research base**

The implementation of the doctoral study programme is supervised by **RSU Department of Doctoral Studies**, managed by the Dean. The administrative work of the Department of Doctoral Studies is carried out by the Office manager, two records managers responsible for the implementation of the doctoral study process, the coordinator of the promotion procedure, the records manager of the doctoral promotion process and the editor responsible for the organisation of all

stages of the promotion process and compliance with the Regulations and the Cabinet Regulations:

### **Dean**

Organises the work of the department in order to achieve its aims and objectives; organises the study process:

- Plans, manages, supervises and develops the activities of the department and its staff; organises and manages the work of the doctoral study council of the department; ensures the doctoral promotion process.
- In cooperation with the faculties and research institutes and laboratories, ensures the recruitment of qualified academic and research staff for the implementation of doctoral study programmes and promotes the growth thereof, and provides the research facilities necessary for the development of the doctoral thesis.
- Ensures the implementation of RSU doctoral study programmes in accordance with the approved accreditation documentation.

Ensures the quality of studies:

- Ensures the development of the necessary competences of the staff involved in the implementation of study programmes, evaluates and monitors the quality of the work of the staff involved in the implementation of study programmes, monitors surveys of students, etc. on the effectiveness of study programmes and, accordingly, encourages quality improvement.
- Follows the latest trends in Europe for the improvement of doctoral studies.
- Ensures quality assessment, collection of indicators and regular reporting to RSU collegiate bodies and RSU management.

### **Office Manager**

Coordinates the work of the department:

- Organises, supervises and controls the work of the department's support staff. Organises, supervises and ensures the core functions of meeting visitors, answering incoming telephone calls, handling correspondence.
- Supervises the coordination and organisation of the study process and the promotion procedure.
- Informs the staff of the department about changes in RSU procedures and processes, as well as in binding legislation. Coordinates the activities of the Department and the development of laws and regulations regulating the study process.
- Effectively handles documentation and information in accordance with RSU Records Management Procedures and other RSU and external laws and regulations, respecting the principles of information protection and confidentiality.

### **Director of the Study Programme**

Ensures the quality of the Study Programmes:

- Follows the development of the field, continuously improves the content of the study programme to ensure the competitiveness of the programme, ensures the fulfilment of the quality indicators of the study programme. Reports on the results of the quality review and recommendations to the superior manager
- Ensures the quality of the work of the staff involved in the implementation of the study programme, attracting professionals in the field, attracting visiting lecturers
- Organises student surveys, encourages student mobility
- Promotes performance indicators in the management of the study programme.

Maintains and updates the Study Programme:

- Prepares the study programme for licensing and accreditation, in cooperation with the staff of the departments involved and the Board of Studies, prepares the description of the study programme, develops the study programme plan and follows up its implementation
- Promotes the scientific research activities of doctoral students, organises and assesses the evaluation of the scientific research work of doctoral students, analyses the performance of students and evaluates the performance of teaching staff
- Organises semester examinations and examinations during the examination period, works with documentation.

### **Coordinator of the promotion procedure**

Organises the doctoral promotion process:

- Provides information, organisational and clerical support to doctoral degree candidates and doctoral thesis supervisors. Organises and participates in meetings for the discussion and defence of doctoral theses, and manages the documents to be examined at the meeting. Prepares minutes, extracts of minutes, decisions of meetings, organises their signing. Collects and provides information (including in electronic systems and databases) about defended doctoral theses, doctoral students, doctoral degree candidates, young scientists. Ensures and coordinates the exchange of information within its competence.

Organises the day-to-day work:

- Prepares documents in accordance with RSU internal and external laws and regulations, observes data protection principles and confidentiality
- Drafts internal laws and regulations related to the doctoral promotion process
- Creates and maintains information necessary for scientific and research activities in databases.

### **Records Manager**

Produces and processes documents:

- Ensures the legal validity of original documents and their derivatives by drawing them up in accordance with laws and regulations governing the drafting and drawing up of documents, record-keeping procedures, language requirements
- Prepares replies to applications, complaints and proposals, in accordance with the internal and external laws and regulations in force
- Ensures the circulation of information.

### **Editor**

Edits and computer proofreads the text:

- Proofreads and literary edits doctoral theses submitted by doctoral degree candidates
- Electronically inputs corrections to the text, tables, diagrams, etc.
- Proofreads the text in accordance with the official language requirements
- Makes electronic corrections to tables, diagrams, re-creates them, if necessary.

### **The tasks of the Department of Doctoral Studies are:**

- participate in the implementation of RSU development directions and strategy,
- implement and develop doctoral study programmes in cooperation with RSU academic and research departments in accordance with RSU strategy,
- ensure the implementation of doctoral study programmes in cooperation with the academic and research departments of RSU, in accordance with the requirements of RSU quality management and academic integrity,
- organise the discussion of the doctoral thesis prior to its submission to the Promotion Council and its submission to the State Scientific Qualification Commission for evaluation,
- organise the doctoral promotion process in RSU promotion councils,
- organise communication with doctoral students, doctoral degree candidates and young scientists,
- participate in the organisation of admissions to doctoral study programmes
- evaluate the scientific activities of doctoral students.

The Department of Doctoral Studies organises the entire study and doctoral promotion process. RSU has already merged both doctoral and doctoral promotion processes in one unit, as foreseen by the new doctoral model, in line with the European Doctorate Concept. Doctoral studies are carried out in a full-time doctoral study programme in which a doctoral student with or without prior research experience studies certain theoretical courses, acquires practical skills and independently develops doctoral thesis. The studies are supported by the state budget subsidy for doctoral studies, scholarships (grants) awarded by the Latvian Council of Science or other institutions, or using the resources of personal or legal persons.

The Department of Doctoral Studies and the Doctoral School are part of RSU Board of Science, headed by the Vice-Rector for Science ([information on RSU management and structure rsu.lv](https://www.rsu.lv/en/information-on-rsu-management-and-structure)). The Department of Doctoral Studies coordinates the implementation of the doctoral StPs in cooperation with RSU faculties and other departments, including ensuring cooperation for the development of doctoral study programmes. Directors of doctoral study programmes and doctoral theses supervisors are lecturers of RSU faculties, as well as researchers of cooperation partners. A consensus on the organisational structure will be established in the process of development of the RSU strategy, which in addition to the directors of doctoral study programmes and the teaching staffs of RSU faculties involved in the implementation of doctoral study programmes will ensure development of doctoral study programmes, involving faculties, institutes and laboratories forming the platform, as well as other RSU structural units, research institutions and sectoral partners.

### **Division of competences between RSU Board of Science, Doctoral School and Department of Doctoral Studies**

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#### **Structure**

#### **Competences**

<b>Board of Science</b>	<ul style="list-style-type: none"> <li>• Coordinates the Doctoral School</li> <li>• Develops scientific platforms:</li> <li>• Medical Platform</li> <li>• Public Health Platform</li> <li>• Social Sciences Platform</li> </ul>
<b>Doctoral School</b>	<ul style="list-style-type: none"> <li>• Promotes interdisciplinary research and provides a critical mass of doctoral students, researchers and academic staff, and ensures and supports the mobility of doctoral students</li> <li>• Promotes the ethical principles of research activity</li> <li>• Promotes networking between doctoral students, academic departments and institutes.</li> </ul>
<b>Department of Doctoral Studies</b>	<ul style="list-style-type: none"> <li>• Attracts doctoral students and organises transparent admission procedures (open competitions) for licensed and accredited doctoral study programmes</li> <li>• Ensures the implementation (including in collaboration with other doctoral schools) and monitoring of doctoral StPs</li> <li>• Involves other higher education institutions and research institutes and innovative companies or associations of companies in cooperation with faculties</li> <li>• Supervises the quality of the supervision of doctoral theses, theoretical doctoral research and artistic creativity</li> <li>• organises the doctoral promotion process</li> <li>• Draws up the documents of the Department of Doctoral Studies</li> </ul>

All RSU doctoral students have the opportunity to obtain funding for their doctoral thesis research, publications and mobility during their studies. Since January 2019, RSU provides 0.25 load for doctoral student-assistant jobs, awarded on a competitive basis to doctoral students who are employed in research projects.

RSU launched the Doctoral School at the end of 2019 as a collaborative research competence development and networking platform for prospective and current doctoral students, doctoral degree candidates, as well as researchers and teaching staff. The Doctoral School provides the following activities: information exchange on competence development opportunities in a One-Stop-Agency format; advice on research design, data processing and interpretation, writing, publication strategy and project preparation (individual and group); research competence development workshops and events; and networking events for doctoral students and researchers. From the spring semester 2020, the Doctoral School organises digital competences development courses, including *Introduction to Bioinformatics*, *Foundations of Machine Learning*, *Basic Visualisation and Data Administration*.

### **Assessment of the information and methodological base of the library resources for the implementation of the doctoral StP Health Care:**

Four e-book databases and seven full-text journal databases are available within e-resource provision in the **field of medicine**.

E-books in medicine are available in the subscribed databases *eBook Academic Collection (EBSCO)*, *eBook Central (ProQuest)*, *AccessMedicine* and *ClinicalKey*. For example, the database *eBook Academic Collection (EBSCO)* offers 27333 e-books under the section "Health and Medicine", but *eBook Central (ProQuest)* - 19108 e-books. The subscribed multidisciplinary databases *eBook*

*Central (ProQuest)* and *EBSCO eBook Academic Collection* offer e-books from different publishers in different disciplines, providing results of the selected information when searching by various topics/keywords.

The full texts of scientific articles in medicine are available in the subscribed databases: *SAGE Premier 2022*, *Health Research Premium Collection (ProQuest)*, *MEDLINE Complete (EBSCO)*, *BMJ Journals*, *Wiley Online Journals*, *Science Direct*, *Academic Search Complete (EBSCO)*. The Primo unified search engine lists

6914 journal titles in the field “Health Sciences”, and 1722 journal titles in the sub-field “Clinical Medicine”.

There are also four evidence-based medical databases *ClinicalKey Clinical Overviews (Elsevier)*, *The Cochrane Library (Wiley)*, *DynaMed (EBSCO)*, *UpToDate (Wolters Kluwer)*.

The “[List of recommended e-books](#)” section on the Library's website contains e-books for the study programmes, both purchased and from subscribed databases (sections for medical specialities, as well as sections on “Biostatistics”, “Research methods”, “Education and pedagogy”, etc.).

Five e-book databases and seven full-text journal databases are available within e-resource provision in the **field of pharmacy**. Since 2021, a dedicated e-book database for the pharmaceutical sector - *AccessPharmacy* (approx. € 9900) - has been subscribed.

E-books in pharmacy are available in the subscribed databases *AccessPharmacy*, *eBook Academic Collection (EBSCO)*, *eBook Central (ProQuest)*, *AccessMedicine* and *ClinicalKey*. For example, the database *eBook Central (ProQuest)* offers 1035 e-books under the section “Pharmacy”, but *eBook Academic Collection (EBSCO)* - 425 e-books. The subscribed multidisciplinary databases *eBook Central (ProQuest)* and *EBSCO eBook Academic Collection* offer e-books from different publishers in different disciplines, providing results of the selected information when searching by various topics/keywords. Database *AccessPharmacy* is McGraw-Hill's interactive, educational platform for pharmacology and pharmacy, containing world-renowned textbooks, videos, images, information about medicinal products and other electronic resources.

The full texts of scientific articles in pharmacy are available in the subscribed databases: *SAGE Premier 2022*, *Health Research Premium Collection (ProQuest)*, *MEDLINE Complete (EBSCO)*, *BMJ Journals*, *Wiley Online Journals*, *Science Direct*, *Academic Search Complete (EBSCO)*. The Primo unified search engine lists 593 journal titles in the sub-field “Pharmacy and Pharmacology”.

Two databases contain information on medicines: *DynaMed*, *ClinicalKey*.

The “[List of recommended e-books](#)” section on the Library's website contains e-books mentioned in the study programmes, both purchased and from subscribed databases (sections such as “Pharmacology and Toxicology”, “Pharmacy, Pharmaceutical Chemistry”, “Research Methods”, etc.).

E-resource provision in the **field of psychological sciences** includes four e-book databases and ten full-text journal databases, as well as an annual subscription to *PsycARTICLES* (around €19 000).

E-books in psychology are available in the subscribed databases *eBook Academic Collection (EBSCO)*, *eBook Central (ProQuest)*, *AccessMedicine* and *ClinicalKey*. For example, the database *eBook Academic Collection (EBSCO)* offers 16375 e-books under the section “Psychology”, but *eBook Central (ProQuest)* - 7564 e-books. The subscribed multidisciplinary databases *eBook Central (ProQuest)* and *EBSCO eBook Academic Collection* offer e-books from different publishers in

different disciplines, providing results of the selected information when searching by various topics/keywords.

The full texts of scientific articles in psychology are available in the subscribed databases: *PsycARTICLES*, *SAGE Premier 2022*, *Health Research Premium Collection (ProQuest)*, *MEDLINE Complete (EBSCO)*, *BMJ Journals*, *Wiley Online Journals*, *Science Direct*, *Communication Source (EBSCO)*, *Sociology Source Ultimate (EBSCO)*, *Academic Search Complete (EBSCO)*. The APA *PsycARTICLES* database contains 146 journals in psychology. The Primo unified search engine lists 687 journal titles in the sub-field “Behavioural Science (Psychology) and Counselling”, and 840 journal titles in the sub-field “Psychiatry & Psychology”.

The “[List of recommended e-textbooks](#)” section on the Library’s website contains the e-books mentioned in the study programmes, both purchased and from subscribed databases (the sections such as “Psychology”, “Health Education”, “Health Communication”, “Psychiatry”, etc. are available).

### **Assessment of the information and methodological base of the IT infrastructure and available resources for the implementation of the doctoral study programme "Health Care" (Medicine, Pharmacy and Psychology)**

When commencing studies, each student is assigned a username and, using the self-service facility, the student can obtain and reset the password, which can be used for RSU IT systems intended for students.

Students use two main sites: the Student portal *MyRSU* and the e-studies. *MyRSU* and e-studies contain all the necessary information about studies and the process thereof, as well as various services provided by the university: electronic timetable of classes, end-of-course assessments, application forms, information about finances, RSU student’s private email box and access to *Office 365*, self-service printing management (printing, scanning, photocopying), study course and study programme evaluation questionnaires, study course descriptions, application for issue of a written statement regarding the student’s status, documents regulating the studies (internal and external laws and regulations), online databases, current information about the student social life. The “E-databases” section of *MyRSU* portal provides students with access to electronic databases such as *EBSCO*, *eBook Central (ProQuest)* etc. from anywhere. In the e-learning environment, students have access to e-study courses that the student is studying or has studied before. A variety of study materials and video lecture recordings are published in e-study courses; tests are organised, written coursework is submitted, and student knowledge is assessed, so that all student assessments, including interim assessment, are available in the e-study courses.

RSU converged e-environment uses open source learning management platform *Moodle*, on the website (hereinafter referred to as e-learning environment).

E-learning environment or the *Moodle* platform is used as a tool for organising the study process in each study course - for placing various materials, taking tests and finishing homework, checking the originality (plagiarism) and for posting assessments. In addition, the e-learning environment provides the calendar of upcoming events and the latest RSU news and discussion forums, as well as study materials and all the latest information that the lecturer of the study course wants to deliver to the students - various assignments, test samples, useful additional materials, etc. Since 2019, *MyRSU* has been linked to the *Moodle* platform. By downloading the *Moodle* app on the phone or tablet, the students can access their study courses, study course materials and grades more easily. In the e-learning environment, students retain access to their study materials until the completion of their study programme. Outdated videos are reviewed every 3 years.

In the e-learning environment, the student can access not only the courses of the current semester,

but also his/her courses, content and grades from previous semesters. The courses of the previous semesters remain exactly as they were when the student took the course. RSU e-learning environment is available 24 hours a day from any location with Internet access.

In the e-learning environment, students have access to the information on the study course, its topics and the expected learning outcomes. Most of the e-courses contain all the necessary additional materials for studies and have links to external sources of information. In most courses, interactive video lectures are created, the recordings of which are found in the e-learning environment of the corresponding course. In addition, e-learning environment also offers the possibility to host online conferences where the lecturer and students can meet virtually. These online virtual classroom meetings can also be watched later as a recording in the e-learning course. In some courses in the e-learning environment, students also have access to electronic tests for successful completion of the study course, which not only allow a quick and qualitative assessment of the students' knowledge, but can also be used as a tool that allows the student to master the course material with the help of the self-test method.

Most of the time, students' work is submitted in the *Turnitin* assignment created by the lecturer. All student papers are submitted to the lecturer-created *Turnitin* assignment, which not only facilitates the collection of papers, but the system automatically checks the originality of the paper, providing a full report on the content plagiarism. The tool has the option of creating rubrics and comment templates, as well as for students to submit and evaluate each other. The anti-plagiarism check is carried out by comparing the submitted work with the work of other students (both at RSU and at other higher education institutions in Latvia and worldwide that use *Turnitin*), internet resources, journals and other publications that are freely available to everyone, as well as other resources that are included in the *Turnitin* database.

In each e-learning course, the lecturer can electronically record student attendance at lectures and classes, and the attendance data is automatically displayed in the e-grades section, thus providing a more convenient overview of the students' performance in the course. The e-learning environment may also be used as a tool by which it is possible to register remotely for elective courses, apply for placements, tutorials, examination dates and times and other events.

Since 2019, a new system of elective courses has been in operation. Students apply for elective courses through the Student portal (*MyRSU*) rather than through the e-studies. Teaching staff and administrative staff have access to the Course Dashboard, which provides information about the e-study courses under their responsibility, such as whether the lecturer has made editorial changes, whether the materials have been imported from the previous semester course, and other useful features. For academic staff, the e-learning environment serves not only as a place to upload learning materials and organise examinations related to their study course, but also as a place to improve their own knowledge. The e-learning environment provides access not only to manuals on how to do various things on the *Moodle* platform, but also makes it possible to apply for various training and career development courses organised by the Centre for Educational Growth. The range of offered courses is broad, allowing to improve both the digital, communication and speaking skills. Ways to use *Moodle* are expanding, for example, for the development of various projects by publishing public materials; there are also videos and other materials from the scientific conference.

In general, it can be assessed that the study base, research base, information base, material and technical base and financial base for the study programme are optimal, meet the conditions for the implementation of the study programme and ensure the achievement of learning outcomes. There have been no changes in this provision since the beginning of the study programme, as it is adequate and provides all the possibilities to maintain the quality of studies.



Attached:

Annex 23.1. Assessment of the informative and methodological provision regarding library resources for the implementation of the study direction “Health Care” in accordance with the requirements of the Guidelines

### **3.3.2. Assessment of the study provision and scientific base support, including the resources provided within the framework of cooperation with other science institutes and higher education institutions (applicable to doctoral study programmes) (if applicable).**

Research infrastructure is an important component of the doctoral study programme: National Research Centre for Public Health and Clinical Medicine, the emerging Laboratory of Finished Dosage Forms (LFDF), the Baltic Biomaterials Centre of Excellence and the Psychology Laboratory.

#### **Branch of Medical sciences.**

In recent years, RSU has effectively developed its medical research infrastructure, which provides doctoral students with modern research equipment for use in their research. For example:

Institute of Oncology, including Laboratory of Molecular Genetics;

Science Hub “Kleisti”, comprising the Institute of Microbiology and Virology, the Institute of Occupational Safety and Environmental Health, the Biochemistry Laboratory, the Interdepartmental Laboratory of Clinical Immunology and Immunogenetics and the Biomechanics Laboratory;

Institute of Public Health.

Whereas, the aim of the Technology Transfer Office is to establish and maintain external relations with the private sector and to promote RSU research capacity, in which RSU doctoral students can obtain practical information about contact bourses, expanding scientific networking.

RSU is a leading partner of the **National Research Centre for Public Health and Clinical Medicine** (Centre). The Centre serves as a cooperation framework for concentrating of scientific resources for research at European level. The partners of the Centre are Rīga Stradiņš University, the University of Latvia and Pauls Stradiņš Clinical University Hospital. The partners of the Centre have established mutually complementary research infrastructures, the use of which is stipulated in the Cooperation Agreement, in line with their research aims and objectives

#### **Infrastructure of RSU part of the Centre:**

**The Science Hub “Kleisti”** - Institute of Microbiology and Virology, Institute for Occupational Safety and Environmental Health, Laboratory of Biochemistry, Joint Laboratory of Clinical Immunology and Immunogenetics and Biomechanics Laboratory, which are spread over the area of 2704 m<sup>2</sup>, providing work for 64 researchers and laboratory staff. The Centre has installed 2 173 185 EUR worth of scientific equipment and apparatus.

**RSU Institute of Oncology** includes several research departments - breast tumours, hereditary cancer research and others. The main sets of equipment and facilities also correspond to the research areas: confocal microscope, laser, cell and cell culture research kit, molecular biology kit,

biotechnology kit, equipment for measuring factors affecting occupational and environmental health, epigenetic research kit, genetic analysis kit, proteome analysis unit, pathology research unit, *FRET* system for direct immunology research, *Multiplex Luminex 200*, computer software package for systems medicine *genXplain*, etc.

Baltic Biomaterials Centre of Excellence (BBCE): The BBCE project aims to establish a cooperation-based Baltic Biomaterials Centre of Excellence, bringing together outstanding research institutions from abroad: AO Research Institute Davos (Switzerland), the Biomaterials Centre of Friedrich-Alexander Erlangen-Nuremberg University (Germany) and from Latvia: RTU Rudolfs Cimdins Riga Biomaterials Innovation and Development Centre, the Latvian Institute of Organic Synthesis and Rīga Stradiņš University. The project will bring together expertise and infrastructure from different fields to create a strong science centre for comprehensive biomaterials research. The Centre will offer the industry a wide range of services, ranging from material development in the laboratory to clinical research. The development is planned not only to increase scientific excellence, but also to involve industry and other scientific institutions, thus facilitating future technology transfer and the introduction of new products into the market.

### **Branch of Pharmaceutical sciences.**

To enable the development of pharmaceutical science, new premises are allocated and new equipment is purchased and new research areas in pharmacy are being developed. Scientific cooperation with LLU has been established, providing for the use of medicinal plants in the development of veterinary dosage forms.

Currently, with the co-financing of the European Regional Development Fund (ERDF), RSU is developing the pharmaceutical research infrastructure, the Laboratory of Finished Dosage Forms, which will provide research and training of students in the field of industrial pharmaceutical technology. The Laboratory will be equipped with two functional equipment units:

- a solid dosage form development unit with equipment for the preparation and packaging of powders, granules, tablets and capsules;
- a standardisation block with equipment for study of raw materials, intermediate products and finished products and materials, as well as for quality control by chromatographic, spectrometric and other analytical methods.

The academic staff of the Faculty of Pharmacy is actively involved in various research projects. Involvement in projects contributes to the scientific competence, growth and fulfilment of criteria of the academic staff, as well as to the involvement of students in research projects in order to promote the development of student research projects, as well as to raise students' awareness of research activity.

At present, the faculty staff and students are involved in several projects (information on projects is available on the project websites in ([Latvian](#) and [English](#))).

### **Branch of psychology.**

To ensure the best quality of the study process, RSU Department of Health Psychology and Pedagogy [maintains close relations with other higher education institutions in Latvia and abroad](#) (Latvian only), ~including those in the United States of America, Greece, Italy, Israel, Cyprus, Russia, the United Kingdom, Lithuania, the Netherlands, Poland and Germany. Good international relations provide an opportunity to learn from the experience of other countries, to acquire new methods and technologies for improving the quality of studies.

It is important that the doctoral theses are developed in [cooperation with various organisations, healthcare institutions](#) (Latvian only), including Riga East Clinical University Hospital (RAKUS), Riga

Psychiatry and Narcology Centre (RPNC), as well as the National Armed Forces of Latvia (NAF). Two foreign professors also supervise doctoral theses and two advise in the doctoral study programme "Psychology".

In order to ensure the development, adaptation and validation of psychological research and assessment tools that meet the requirements of modern science, as well as to provide advice on issues of psychometry to RSU teaching staff and students, RSU operates a Psychology Laboratory (information in [Latvian](#) and [English](#)).

**3.3.3. Indicate data on the available funding for the corresponding study programme, its funding sources and their use for the development of the study programme. Provide information on the costs per one student within this study programme, indicating the items included in the cost calculation and the percentage distribution of funding between the specified items. The minimum number of students in the study programme in order to ensure the profitability of the study programme (indicating separately the information on each language, type and form of the study programme implementation).**

#### **Characteristics of the financial base**

The study programme in Latvian in the sub-programmes "Medicine" and "Pharmacy" is financed from the state budget funds for higher education, as well as financing of private and legal persons is possible. The tuition fees are equal to the State budget funding. The sub-programme "Psychology" is funded by private and legal entities.

The number of students in the sub-programme "Medicine" is 128 for all years of study and 33 for the first year. The number of students in the sub-programme "Pharmacy" in all years of study is 13, in the first year - 5. The planned number of students in the sub-programme "Psychology" in all years of study is 12, in the first year - 4.

The study programme in English is planned to be financed from the funds of private and legal entities, with a tuition fee of EUR 20 000 per year. The minimum number of students per group is 12.

The funding is used for staff remuneration, recruitment of visiting lecturers and taxes, IT infrastructure maintenance, doctoral study grants, purchase of equipment and facilities and study visit expenses. In addition to the direct costs of lectures and classes, the study programme has to cover the costs of infrastructure maintenance (premises, IT solutions) and other common RSU resources used in the study programme (Student Services, Library, organisation of the study process, subsidy to the Student Union and other support and administrative functions), as well as the costs of the research infrastructure involved in the study process.

The study programme will be implemented by RSU Department of Doctoral Studies, Language Centre, Department of Clinical Skills and Medical Technologies, Department of Health Psychology and Pedagogy, Department of Public Health and Epidemiology, Department of Humanities and the Statistics Unit. The total annual budget of these departments is EUR 3.0 million.

Remuneration of academic staff in the first year of the study programme is planned at EUR 182 thousand. For 4 years of study, the doctoral study grant funding is possible up to EUR 12 thousand per 1 student in the sub-programme "Medicine", up to EUR 8 thousand per 1 student in the sub-programme "Pharmacy".

A wide range of RSU facilities is available for the implementation of the study courses, allowing for the reservation of study rooms and computer rooms in a common system.

Table 6. Information on student costs in Latvian.

<b>Title</b>	<b>Medicine</b>	<b>Pharmacy</b>	<b>Psychology</b>
Average revenue per student, EUR	17 263	14 671	2 100
Average cost per student, EUR	17 263	14 671	5 845
Academic staff, %	32%	38%	42%
Doctoral study grants, %	17%	14%	0%
Department resources, %	6%	7%	17%
Other direct expenses, %	4%	5%	1%
Fixed costs, %	4%	4%	3%
Research infrastructure and overheads, %	30%	30%	37%
For capital investments (equipment) and development, %	7%	2%	0%

Table 7. Information on student costs in English:

<b>Title</b>	<b>Costs</b>
Average revenue per student, EUR	20 000
Average cost per student, EUR	20 000
Academic staff, %	45%
Doctoral study grants, %	15%
Department resources, %	5%
Other direct expenses, %	0,4%
Fixed costs, %	3%
Research infrastructure and overheads, %	26%
For capital investments (equipment) and development, %	6%

### 3.4. Teaching Staff

**3.4.1. Assessment of the compliance of the qualification of the teaching staff members (academic staff members, visiting professors, visiting associate professors, visiting docents, visiting lecturers, and visiting assistants) involved in the implementation of the study programme with the conditions for the implementation of the study programme and the provisions set out in the respective regulatory enactments. Provide information on how the qualification of the teaching staff members contributes to the achievement of the learning outcomes.**

All academic staff involved in the implementation of the doctoral study programme are highly qualified in accordance with the conditions for the implementation of the study programme and the requirements of the legislation and ensure the achievement of the aims and learning outcomes of the study programme and the corresponding study courses. The following **qualification requirements** apply to the selection of **teaching staff**:

- Doctoral degree (Ph D) in medicine and health sciences or social sciences;
- teaching staff in medicine, pharmacy and psychology are active researchers and experts of the Latvian Council of Science (LCS) (information in [Latvian](#) and [English](#));
- previous teaching experience;
- participation in research projects, working groups and science dissemination is desirable;
- knowledge of English at a level appropriate to the job responsibilities (at least B2);
- appropriate digital skills.
- in some cases, the StP may involve teaching staff with valuable competences and skills, as well as experience in the implementation of study courses, but whose scientific qualifications may not meet one or more of the criteria.

**Research directions** and outcomes **of the academic staff** involved in the doctoral study programme are the following:

- 1) oriented towards successful implementation of the doctoral study programme;
- 2) related to the individual interests and research activities of the doctoral teaching staff by participating in international and national research projects.

**Teaching staff** constantly **participate in research work**, present reports at scientific conferences, including international conferences. Teaching staff regularly participate in *Erasmus +* mobility teaching in foreign higher education institutions (for example, Erasmus + visit on 22 to 25 March 2022 to Vilnius University, Faculty of Medicine, Doctoral School). Several lecturers are authors or co-authors of scientific monographs, including on scientific research methodology and scientific writing and dissemination of research results, as well as several collective monographs, mainly in the field of psychology. All the teaching staff prepare international peer-reviewed publications and review scientific papers. Several lecturers work on editorial boards of scientific journals, participate in funded research projects, are experts in various projects. and are members of professional organisations, work and represent international organisations. More information on the teaching staff CVs.

To improve the content of the study programmes, it is planned to attract foreign visiting lecturers.

RSU Human Resources Department supervises that, when creating a new study programme, academic and research staff complying with provisions of Section 55, Paragraph 1, Clause 3 of the Law on Higher Education Institutions and the Law on Scientific Activity are involved for its provision.

RSU Human Resources Department checks the official language skills when selecting the staff, as well as while collection of documents during the preparation process for the academic election.

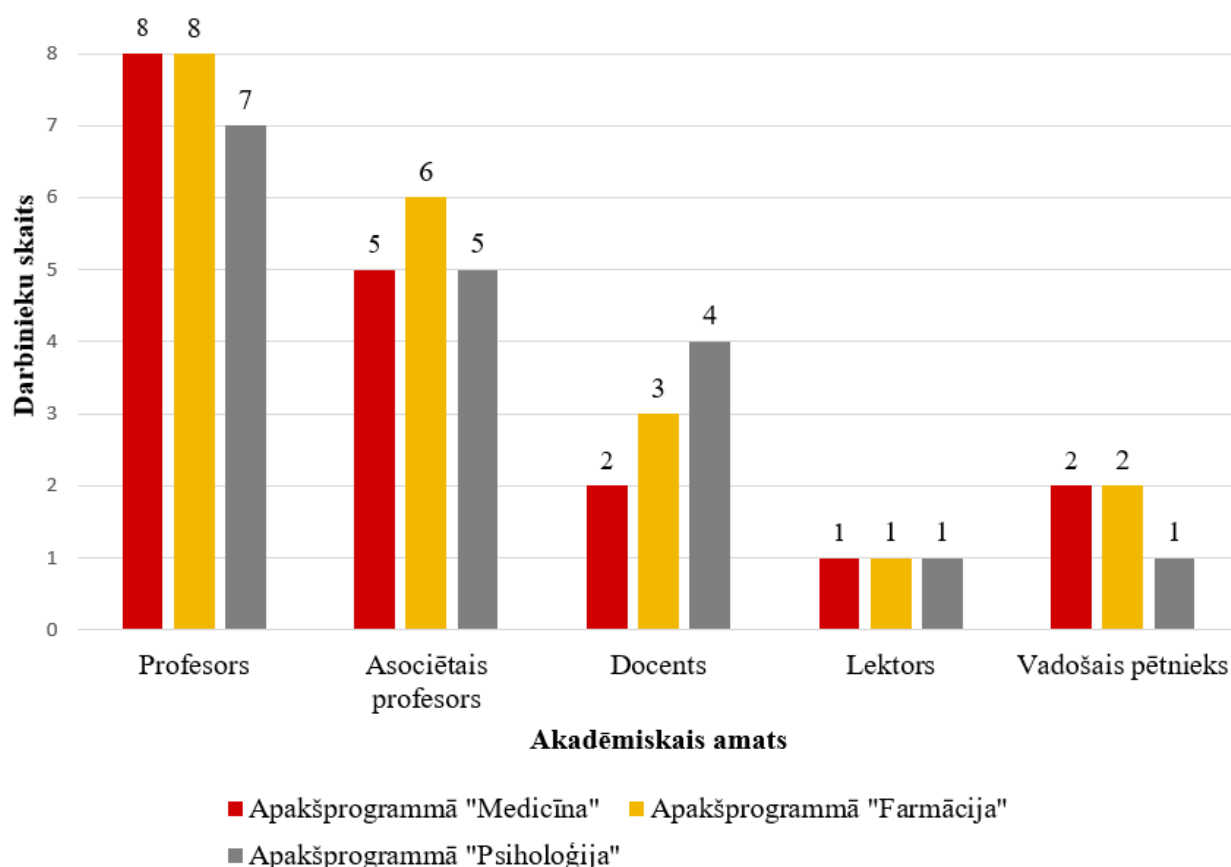


Figure 1. Academic positions of staff in DSP Health Care by sub-programme.

There are **25 lecturers involved in the implementation of the doctoral programme**, 23 of whom have a doctoral degree. 19 of the 25 lecturers are experts approved by the Latvian Council of Science (LCS). 23 of the lecturers involved in the implementation of the study programme are employed at RSU (as elected, acting or hourly lecturer) (for more information see Annex 24.7 "Analysis of the composition of teaching staff").

Table 8. Analysis of the relevance of the qualifications of the teaching staff to the achievement of the outcomes of the study programme "Health Care"

No	Outcome of the study programme	Qualifications of the teaching staff involved
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<p>1. Analyse and explain current scientific theories and modern research methods, integrate the knowledge and competence acquired in interdisciplinary and multidisciplinary education in the implementation of original research projects and academic work.</p>	<p>To achieve this goal, the teaching team of the Methodology courses includes highly qualified experts who have demonstrated their competences both through internationally cited interdisciplinary publications and through effective participation in international and national research teams:</p> <p><i>Dr. sc. Soc.</i>, Assistant prof. <b>A. Ivanovs</b> participates in the SHARE research, is the coordinator of the Latvian study, and in recent years has citable publications in collaboration with professionals in the field of infectious diseases, as well as in the <i>EUROMENE</i> network. The specificity of research data processing was also the basis for individualizing the doctoral study course in mathematical methods of statistics according to the aim and knowledge.</p> <p>The course "Multivariate Statistics and Modelling in Psychology" is taught by Assistant prof. <i>Dr. psych.</i> <b>J. Lubenko</b>, who is a participant of several internationally funded research, currently continues her work in the interdisciplinary <i>COVID-IMPACT</i> project, uses and teaches doctoral students to use innovative methods such as web interventions in psychology, artificial intelligence.</p> <p><i>Dr. med.</i> Prof. <b>G. Brīdis</b> is a lecturer of the course "Epidemiology Part 1 and Epidemiology Part 2" and is a pioneer of epidemiological research in Latvia, still regularly participates in CSP, international <i>EUROSTAT</i> monitoring, high-quality scientific data processing is confirmed by publications and H-index 10. Acting professor <i>Dr. psych.</i> <b>A. Pipere</b> teaches several courses: "Philosophy and Logic of Science" and "Qualitative Research Methods", she is the author and/or scientific editor of monographs on scientific aspects of psychology (e.g. "Methodology of Scientific Activity: Interdisciplinary Perspective" and "Research: Theory and Practice"), which justifies her high competence and efficiency in teaching study courses.</p> <p><i>Dr. med.</i> Prof. <b>A. Villeruša</b> and associate prof. <b>I. Gobiņa</b> are lecturers in the course of methodology of scientific activity, they have participated in various international studies for many years, currently in the <i>HEALTHY BOOST</i> project, which confirms their ability to design a project, choose optimal statistical methods and publish it (H-indices 8 and 16, respectively).</p> <p><i>Dr. psych.</i> Assistant prof. <b>J. Koļesņikova</b> is a lecturer in the course "Developmental Trends of Modern Psychology and Interdisciplinary Approach in the Context of Health Care", is a co-author of the monograph "Health Psychology. Interdisciplinary Perspective of Theory and Practice". She applies and complements her knowledge in research projects and in her practice as a clinical psychologist.</p> <p>Compliance with bioethics regulations is the basis of any research project; the study course is taught by <i>Dr. Phil.</i> prof. <b>V. Sile</b> who is the author of two bioethics monographs and the Latvian representative of the Medical Ethics Network.</p> <p>Knowledge transfer is an essential part of academic work, the course "Learning and Teaching in Higher Education and Research Area" is taught by Assoc. prof. <i>Dr. paed.</i> <b>N. Jansone-Ratinika</b>, one of the founders of RSU Centre for Educational Growth (PIC) in 2012, its only director, whose work has resulted in effective continuing education of all RSU employees, including academic staff involved in the doctoral study programme. She is active in science as one of the research team of the VPP-COVID-2020/1-0013, she also participates in the project funded by the European Structural Funds on the improvement of study processes and modernisation of the content of study programmes at RSU. She actively participates in scientific conferences on the above-mentioned topics and is the author of book chapters.</p>
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2. Independently develop original research in the field, using methodology and technologies that meet the requirements of modern science, critically evaluate the results obtained and disseminate them by preparing presentations at conferences and publishing internationally citable scientific articles, thus contributing to tackling problems related to human health and expanding the boundaries of knowledge and providing a new understanding of existing knowledge and its use in practice.

The teaching staff of the doctoral StP are the authors of two editions of the collective monograph "Scientific Writing and Dissemination of Research Results": articles by **I. Gobiņa, M. Dambrova, K. Mārtinsone, A. Pipere**, scientific editors K. Mārtinsone and A. Pipere. The course "Scientific Writing and Scientific Communication" is taught by 3 leaders in the field of science: *Dr. pharm. prof. M. Dambrova*, whose optimal suitability for the purpose is confirmed by 140 scientific articles in *SCI* journals (*Scopus*: 2135 citations, H-index 25), participation in the management, coordination and evaluation of numerous international projects.

*Dr. psych. prof. K. Mārtinsone* is the author and/or scientific editor of 17 monographs on scientific aspects of psychology, actively publishes in *SCI* journals, participates in National Research programmes, in the development of knowledge society, which proves her determination and achievement of goals also in pedagogical work.

*Dr. med. prof. A. Lejnieks* is an experienced teacher, has supervised 15 successfully defended doctoral theses, is the author of ideas for many national research projects, and is currently starting an FLPP. He is a member of the editorial board of scientific journals, member of the organising committee and scientific council of many scientific conferences, actively publishes, H-index 12.

The study course "Big Data in Biomedicine" is taught by *Ph. D. B. Vilne* - Doctor of Science in bioinformatics, who is able to explain the use of modern methodological tools in an attractive and understandable way, proving her expertise in them with high quality publications (H-index 14).

Students will strengthen their ability to present and disseminate their results in the doctoral seminars, which will be led, alongside the above-mentioned leaders in the field, by prof. *Dr. med. I. Konrāde*, a widely recognised, competent lecturer in Latvia, who is also active in the development of the knowledge society. The ability to design and implement a research project is demonstrated by participation in research projects (NRP, FLPP, ERANET) and scientific publications (H-index 16).

The seminars will also be led by *Dr. pharm. assoc. prof. D. Bandere*, who has experience in many research projects (e.g. *EU TEAMING* project "*Baltic Biomaterials*") and high-quality publications (H-index 6). These competences and skills are optimal for the achievement of the target result.



Carries out scientific communication about his/her field of scientific activity in national and international research area, involving in organisations and consortia, as well as society as a whole, including the implementation of academic work in the fields of medicine, pharmacy and psychology in accordance with the achievements of modern pedagogy, ensuring the integration of research and academic work.

The course "Learning and Teaching in Higher Education and Research Area" is taught by Assoc. prof. *Dr. paed.* **N. Jansone-Ratinika**, who is an experienced pedagogue, who founded RSU PIC in 2012 and is currently the Director. Her areas of expertise - the study process at a higher education institution, including remote teaching expertise during the COVID-19 pandemic, adult learning, lifelong learning, quality management and evaluation of higher education - are interlinked with academic activities and competences in education. Until 2023, she is participating in a project funded by the European Structural Funds on the modernisation of the study process and study content at RSU. Active national and international communication of the results of the research group within the framework of the NRP until March 2021 "Life with COVID-19: Evaluation of overcoming the coronavirus crisis in Latvia and recommendations for societal resilience in the future", strengthening societal cohesion.

All lecturers involved in the implementation of the doctoral study programme are active teachers in RSU departments, supervising students' research work, involving doctoral students in pedagogical work, also implementing VIP ideas.

The publication "Scientific Writing and Dissemination of Research Results", which systematises knowledge dissemination skills, contains articles by **I. Gobiņa, M. Dambrova, K. Mārtinsons, A. Pipere**, lecturers of the study course. Knowledge dissemination skills are taught in the course "Scientific Writing and Scientific Communication", taught by experienced teachers **K. Mārtinsons**, who has written 6 monographs on the subject, and **M. Dambrova** and **A. Lejnieks**, who are leaders in the field and academicians of the Latvian Academy of Sciences. The competences outlined are reinforced in seminars for doctoral students with experts in the field:

**I. Konrāde** (a lecturer at international and national conferences, most viewed health videos on *YouTube*) and **D. Bandere**, who is active in international projects on pharmaceutical topics and student-centred education.

For effective communication, as one of the most sought-after lecturers of the Doctoral School subjects, the new study programme involves Associate Visiting Professor (Ventspils University College) *dr. philol.* G. Dreijers in the study course "English for Research". The course was initiated following a suggestion from students during discussions on the content of the new doctoral study programme

All lecturers of the doctoral study programme are also involved in professional associations, international professional associations, both as members and board members, and are recognised lecturers in the field, involving doctoral students in these activities. For example, *Dr. pharm. assoc. prof.* **B. Mauriņa** is the Vice President of the Latvian Pharmacists' Association, the Chairperson of RSU Ethics Committee, which involves students and doctoral students in the activities and dissemination of knowledge of the Association and can make a significant contribution to the field of academic integrity.

<p>4. Independently improve their scientific qualifications and implement or lead research or development projects that meet international criteria of the field in companies, institutions, organisations.</p>	<p>As mentioned above and in their CVs (Annex 13), all study course lecturers are actively involved in research projects involving doctoral students. <i>Dr. pharm. prof. M. Dambrova</i> is on the evaluation committees of many projects. M. Dambrova also manages the Laboratory of Pharmaceutical Pharmacology at LIOS, where Assoc. prof. <b>R. Vilšķērsts</b> also works, effectively integrating and expanding the scientific capabilities of RSU in collaboration with research institutes. An excellent example in psychology is the 2018-2021: National Research Programme: INTERFRAME-LV "Challenges and Solutions for the Development of the Latvian State and Society in the International Context" (main participant prof. <b>K. Mārtinsone</b>). Information literacy, which is important for the development of scientific qualification, is taught by <b>I. Znotiņa</b>, a competent bibliographer, senior librarian of the Department of Information, Bibliography and Information Literacy of RSU Library, whose practical experience and competence in working with scientific information search, databases has been proven in the courses of the Faculty for Continuing Education and RSU provision with databases, e-books and other library services for the achievement of research results.</p>
<p>5. Continuously improve communication, reasoning, cooperation, problem-solving, digital and other widely-applicable skills, which are essential for the development of interdisciplinary/multidisciplinary research.</p>	<p>The course "Learning and Teaching in Higher Education and Research Area" is taught by Assoc.prof. <i>Dr. paed. N. Jansone-Ratinika</i>, who practically demonstrates content-oriented and result-oriented learning, which are the competences of the associate professor, a long-standing Director of the PIC. The PIC content has been a cornerstone in the continuing education of lecturers for many years, including the widely used competences with study content based on staff feedback, a justified nominee for the Award for Lifelong Learning "Saules balva". The course 'Scientific Writing and Scientific Communication', led by <b>K. Mārtinsone</b>, who has written 6 monographs on the subject, and <b>M. Dambrova</b> and <b>A. Lejnieks</b>, includes activities aimed at developing argumentative, structured dialogue under the guidance of skilled teachers.</p> <p>The competences will be strengthened by prof. <b>I. Konrāde</b> (HI 16), a long-standing practitioner in the field of adult pedagogy in diabetes education, lecturer on healthy lifestyle (YouTube, Forum "Leader 2021", Conversation Festival "Lampa") in the doctoral seminars</p> <p>A number of widely used practice courses will also be included in the elective study courses (C).</p>

RSU regularly organises seminars and other professional development and experience exchange events to strengthen and develop the skills and competences of doctoral thesis supervisors, for example, seminars on pedagogy, methodology, mobility aspects for more effective thesis supervision are offered every year. To improve their competences and skills, doctoral theses supervisors can take advantage of the seminars offered by the School of Young Lecturers and workshops by RSU PIC. The Doctoral School offers focused research competence development workshops and networking events for both doctoral students and lecturers. More information on the skills and competences of doctoral theses supervisors is provided in the doctoral StP Recommendations Implementation Plan.

Attached:

Annex 24.6. Evidence of doctoral degrees, for LCS experts - applies to doctoral study programmes.

Annex 24.7. Analysis of the composition of the teaching staff.

### 3.4.2. Analysis and assessment of the changes to the composition of the teaching staff over the reporting period and their impact on the study quality.

In the doctoral programme, the changes in the composition of the teaching staff are small, and the academic staff involved have proven to be a strong team. The changes have been made for objective reasons (change of workplace) and have not affected the quality of studies.

RSU is taking targeted measures to ensure that changes in the composition of the teaching staff, if any, do not adversely affect the quality of study programme implementation and compliance of the study programme with the requirements set out in the laws and regulations. RSU PIC organises various educational activities: thematic cycles, seminars, guest lectures, conferences, discussions, etc., which are available free of charge to every member of the academic family of Rīga Stradiņš University.

In the academic year 2022 / 2023, the visiting lecturers Dr. Angelos Kassianos (Cyprus University of Technology, [CV in English](#)) and Dr. Daiga Kamerāde (University of Salford, [CV in English](#)) participated in the implementation of study courses.

In the autumn semester of 2022, Dr. Angelos Kassianos was invited to give a lecture in the study course DN\_178 "Doctoral Seminar 'Methodology and Methods of Doctoral Thesis Development'", and it is planned to offer the Dr. Angelos Kassianos' course "Oncopsychology" in spring semester of 2023 together with Doctoral School for doctoral students and all the interested parties. The course description is still in progress and dates and times for the implementation of the course are being agreed.

In the spring semester of 2023, Dr. Daiga Kamerāde was invited to give a lecture in the study course DN\_205 "Scientific Writing and Scientific Communication".

**3.4.3. Information on the number of the scientific publications of the academic staff members, involved in the implementation of doctoral study programme, as published during the reporting period by listing the most significant publications published in Scopus or WoS CC indexed journals. As for the social sciences, humanitarian sciences, and the science of art, the scientific publications published in ERIH+ indexed journals or peer-reviewed monographs may be additionally specified. Information on the teaching staff included in the database of experts of the Latvian Council of Science in the relevant field of science (total number, name of the lecturer, field of science in which the teaching staff has the status of an expert and expiration date of the Latvian Council of Science expert) (if applicable).**

On 26 March 2023, a list of publications (scientific articles, conference papers, editorials, specialist publications, etc.) of lecturers of the study field "Health Care" for the period from 1 January 2017 to 25 March 2023 was retrieved from the RSU Scientific Activity Information System (ZDIS Pure). ZDIS Pure is used to retrieve the list of publications, as it collects the most comprehensive information on the results of scientific activities of RSU academic staff - publications, projects, awards, research activities, datasets, presentations, communication in the press and media, etc.

For the 25 lecturers involved in the Doctoral Programme in Health Care of the Study Direction "Health Care", ZDIS Pure has data on 582 publications since 2017. 23 lecturers have data on one or more publications - the most productive lecturers are Aivars Lejnieks (111), Maija Dambrova (80) and Kristīne Mārtinsons (57). The highest number of publications have been produced in 2021 (188), 2020 (109) and 2022 (83). More information about the publications of the academic staff is available in Annex 6.4.

Attached:

Annex 6.4. Results of the scientific activity of the academic staff of RSU Department of Doctoral Studies and a list of publications by Journal Impact Factor.

**3.4.4. Information on the participation of the academic staff, involved in the implementation of the doctoral study programme, in scientific projects as project managers or prime contractors/ subproject managers/ leading researchers by specifying the name of the relevant project, as well as the source and the amount of the funding. Provide information on the reporting period (if applicable).**

In the RIS3 specialisation area "Biomedicine, Medical Technologies, Biopharmaceuticals and Biotechnologies", RSU already has a strong tradition in areas such as biopharmaceuticals and infectious diseases, but now personalised medicine is also increasingly being considered for international projects.

The active involvement of lecturers in both Latvian Research Council-funded research and international projects is one of the basic conditions for the effective management of study courses and StP, both in concept and in terms of funding. Participation in projects, in which usually one of the doctoral students also actively participates, allows them to gain experience in project implementation: planning, discussion of pilot results and preparation of publications. International projects also provide a European perspective.

Within the project "*Alliance for Life Sciences: From Strategies to Actions in Central and Eastern Europe, WP4 Competences in Innovation for Human Health*" led by prof. Dambrova, doctoral student Melita Ozola led the young scientists' section and actively mastered knowledge dissemination by repeatedly presenting the results to an international audience. Similarly, the funding of the Latvian Science Council in the project "*Interplay of Environmental and Genetic Factors in the Immunologic Mechanisms of Thyroid Autoimmune Diseases*" led by prof. Konrāde has enabled the completion of 3 PhD theses on thyroid health: one of them, *Thyroid Autoimmunity: Exploring the Role of Th17-associated Cytokines and Pathomorphological Mechanisms Involved in the Pathogenesis of Hashimoto's Thyroiditis and Graves' Disease*, has already been defended in 2022. A doctoral thesis on iodine supplementation of pregnant women is being prepared for defence in November and a doctoral thesis on lifestyle and genetic factors analysis is being prepared for defence in March.

As the proportion of doctoral students participating in FLPP or internationally funded projects increases, it is also an opportunity to attract promising doctoral students from other countries. Aniket Savant is a doctoral student who is taking part in *dr.med.* Baiba Vilne's personalised medicine project [PROGRESS](#). An overview of the most important projects of the lecturers involved in the implementation of the doctoral programme is given in Annex 13.2.1.

The projects carried out by the academic staff contribute to the development of research capacity and competitiveness, which could also be characterised by an increase in the number of scientific articles in Web of Science databases and Scopus journals, thereby strengthening the authority and recognition of RSU as a study and research centre.

Attached:

Annex 13.2.1. Information on the doctoral study programme's academic staff involvement in research projects (2020-2023)

**3.4.5. Assessment of the cooperation between the teaching staff members by specifying the mechanisms used to promote the cooperation and ensure the interrelation between the study programme and study courses/ modules. Specify also the proportion of the number of the students and the teaching staff within the study programme (at the moment of the submission of the Self-Assessment Report).**

Meetings are held with the lecturers of the study courses in order to obtain the opinion of the lecturers involved in the implementation of the study courses and to listen to suggestions for improving the implementation of the study programme. For example, after the meeting with the lecturers of the study course SVUEK\_061 "Methodology of Scientific Activity", the decision was taken to implement this course in the autumn semester of the 1st year of study. This would enable doctoral students to develop their understanding and skills in research methodology at the start of their studies, to consolidate the knowledge and skills necessary to support the research process in conducting scientific research in the field of medicine and health care, to develop the skills to independently plan and implement research, following general and discipline-specific research principles, to develop the ability to identify and mitigate potential limitations of research, to critically evaluate the strength of scientific evidence and to communicate the research design. Whereas the study course DN\_178 "Doctoral Seminar "Methodology and Methods of Doctoral Thesis Development" will be implemented in the spring semester of the 1st year of study to enable doctoral students to demonstrate in the course sessions their ability to explain and argue the idea of their research work, the scientific evidence background at the current moment and the chosen research methodology, as well as to communicate effectively with other students and the lecturer about the chosen methods, to critically analyse recommendations, to focus the research idea in interdisciplinary communication about other doctoral theses and to exercise respectful, complementary scientific understanding of other research areas. Both RSU teaching staff and visiting lecturers are involved in the implementation of doctoral seminars. For example, RSU prof. Maija Dambrova, lead researcher Ieva Strēle, visiting lecturer Daiga Kamerāde, visiting lecturer Angelos Kassianos.

Attracting competent foreign lecturers is one of the most important conditions for quality, so, for example, one doctoral seminar for both 1st and 3rd year doctoral students was led by *Dr.psych.* Angelos Kassianos, a lecturer from the Technical University of Cyprus, whose topic of the doctoral thesis and research activity is dedicated to the field of integrative medicine such as psychooncology. The visiting lecturer is also an editor of the journal "[Quality of Life Research](#)" (IF: 4,147), so the 3rd year doctoral students had the opportunity to ask questions about publishing and the progress of their research.

Daiga Kamerade from the University of Salford in the UK participated in the study course "Scientific Writing and Scientific Communication" this academic year, thus integrating diaspora scholars into the doctoral study programme.

Meetings are organised with doctoral students from all sub-programmes to gather their views on the implementation of the study programme and to listen to their suggestions for improving the study programme. This year, such a meeting was held in August 2023 to hear the views of 1st year doctoral students on the implementation of the study programme and possible improvements. One of the recommendations of the doctoral students was to continue to attract high quality lecturers on certain specific topics. Given the technological literacy and opportunities, it is planned to attract many more high-quality lecturers within the Doctoral School, allowing the attendance of the

Doctoral School courses to be validates as Part C courses.

The ratio of students to lecturers in the study programme: 189 students and 25 lecturers. The student-teaching staff ratio is 7.6.

# Annexes

III - Description of the Study Programme - 3.1. Indicators Describing the Study Programme		
Sample of the diploma and its supplement to be issued for completing the study programme	Annex_24_Sample_Diploma_ar_starpliku-.pdf	24_pielikums_diploma_paraugs_ar_starpliku.pdf
For academic study programmes - Opinion of the Council of Higher Education in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions (if applicable)		
Compliance of the joint study programme with the provisions of the Law on Higher Education Institutions (table) (if applicable)		
Statistics on the students in the reporting period	16_Anx_Stud_statistics_DStP_Health_Care.pdf	16_pielik_Veselibas_aprupe_statistika_lv.pdf
III - Description of the Study Programme - 3.2. The Content of Studies and Implementation Thereof		
Compliance with the study programme with the State Education Standard	Annex 17.1_Compliance of DSP Health Care with the requirements of regulatory enactments.pdf	17.1_pielik_Atbalstiba_valsts_izglitiba_standartam.pdf
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard or the requirements for professional qualification (if applicable)		
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)		
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	18.1_Anx_St_course_mapping_to_achieve_learn_out_DStP_Health_Care.pdf	18.1_pielikums_DSP_Veselibas_aprupe_07-07-2021.pdf
The curriculum of the study programme (for each type and form of the implementation of the study programme)	Annex 19_Plan for full time studies_DSP Health care.pdf	19.0_pielik_Planojums_VA_PL_EN_LV.pdf
Descriptions of the study courses/ modules	20.1_Anx_Study_course_descrip_Doctoral_StP_HealthCare.pdf	20.1_pielik_Kursu_apr_DSP_VA.pdf
Description of the organisation of the internship of the students (if applicable)		
III - Description of the Study Programme - 3.4. Teaching Staff		
Confirmation that the academic staff of the doctoral study programme includes not less than five doctors, of which at least three are experts approved by the Latvian Council of Science in the branch or sub-branch of science in which the study programme intends to award a scientific degree (if applicable)	Annex 24.6_24.7_Analysis of the academic staff_DSP Health Care.pdf	24.6_24.7_pielik_Apliecinajums_par_StP_iesaistajiem_macibspekiem.pdf
Confirmation that the academic staff of the academic study programme complies with the requirements specified in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions (if applicable)	Annex 24.6_24.7_Analysis of the academic staff_DSP Health Care.pdf	24.6_24.7_pielik_Apliecinajums_par_StP_iesaistajiem_macibspekiem.pdf

# Supervision (47142)

Study field	<i>Health Care</i>
ProcedureStudyProgram.Name	<i>Supervision</i>
Education classification code	<i>47142</i>
Type of the study programme	<i>Professional master study programme</i>
Name of the study programme director	<i>Baiba</i>
Surname of the study programme director	<i>Pumpina</i>
E-mail of the study programme director	<i>Baiba.Pumpina@rsu.lv</i>
Title of the study programme director	<i>Mg. paed., asistenta p.i.</i>
Phone of the study programme director	
Goal of the study programme	<i>To provide theoretically justified and practically applicable professional studies in order to prepare highly qualified and competitive supervisors in the changing socio-economic conditions and international labour market in accordance with the Standard of Professional Higher Education, ANSE (Association of National Organisations for Supervision in Europe) guidelines and the Standard of the Supervisor's Profession. In the supervision healthcare environment, the focus is on expanding/improving the knowledge of a practicing professional, helping to improve clinical skills, developing autonomy and self-assertion as a professional, thus promoting the compliance of professional activity with healthcare practice standards/guidelines and ensuring the provision of quality healthcare services.</i>
Tasks of the study programme	<ol style="list-style-type: none"> <li><i>1. To provide students with in-depth theoretical knowledge and practical skills in the study process, in accordance with the competences required for the profession of a supervisor</i></li> <li><i>2. To develop and broaden students' knowledge of research methodology, facilitate the development of topical research projects related to the profession of a supervisor, popularise the obtained data and inform the public about them</i></li> <li><i>3. To foster cooperation with various state, municipal, medical, non-governmental and private organisations in order to provide placement opportunities for students</i></li> <li><i>4. To carry out scientific activities contributing to the development of the supervisor's profession (research, publications, books).</i></li> <li><i>5. To encourage further research activity of students - after obtaining the Master's degree to provide the right to study for a doctoral degree.</i></li> </ol>



Results of the study programme	<p>1. <i>Able to demonstrate in-depth theoretical knowledge and understanding, as well as able to apply the latest technologies in adult education and counselling in practice.</i></p> <p>2. <i>Able to plan and implement research relevant to the basic principles of research and to the current issues of the profession, and to summarise and present the results in a reasoned manner, thereby contributing to the development of the profession.</i></p> <p>3. <i>Able to independently formulate and critically analyse professional dilemmas, to explain and discuss supervision in a reasoned manner with both professionals and non-specialists.</i></p> <p>4. <i>Able to independently organise, administer, manage and evaluate supervision processes at individual, group, team and organisational levels, applying appropriate methods in supervision.</i></p> <p>5. <i>Able to assess and analyse the efficiency of supervision, able to provide valid feedback to supervisees and the supervision client.</i></p> <p>6. <i>Able to practice ethical responsibility by understanding the potential impact of their own actions on individuals, groups and society as a whole.</i></p> <p>7. <i>Able to independently direct the development of their competences and further professional development.</i></p>
Final examination upon the completion of the study programme	<p>National (qualification) exam.</p> <p>Defence of Master's Thesis.</p>

## Study programme forms

### Full time studies - 2 years - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	2
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	80
Admission requirements (in English)	<i>Bachelor's degree or equivalent degree, or professional higher education with a qualification in the following thematic areas: Health care, healthcare services, social and human sciences, social welfare, teacher education and education sciences, business and administration, humanities.</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	<i>Professional Master's degree in Paedagogy</i>
Qualification to be obtained (in english)	<i>Supervisor</i>

### Places of implementation

Place name	City	Address
Rīga Stradiņš University	RĪGA	DZIRCIEMA IELA 16, KURZEMES RAJONS, RĪGA, LV-1007

### 3.1. Indicators Describing the Study Programme

**3.1.1. Description and analysis of changes in the parameters of the study programme made since the issuance of the previous accreditation form of the study field or issuance of the study programme license, if the study programme is not included on the accreditation form of the study field, including changes planned within the evaluation procedure of the study field evaluation procedure.**

Table 1. Changes in StP parameters

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation	Planned changes within the assessment procedure
1.	Study direction	—	The programme has so far been implemented by StD “Education, Pedagogy and Sports”, however, it was applied for accreditation with StD “Health Care” and during the accreditation it is planned to receive a confirmation for the inclusion of the programme in this direction.
2.	Title of the StP	—	—
3.	Code according to the Latvian Education Classification	—	—
4.	Head of the StP	In 2014-2015, the head of the programme was dr. psych., professor K. Mārtinsone, in 2015-2016, the head of the programme was Dr. psych. J. Ļevina, in 2016-2018, the head of the programme was Dr. med. Kristaps Circenis From 2018 until now StP director is Mg.paed. Baiba Pumpiņa.	—

No.	Parameter	Description and analysis of changes in StP parameters during the accreditation	Planned changes within the assessment procedure
5.	Scientific degree of the head of the StP	Mg. paed.	—
6.	Objective of the StP	—	—
7.	Tasks of the StP	—	—
8.	Learning outcomes to be achieved	—	—
9.	Final examination upon the completion of the StP	From 2017 Changes to National degree examinations have been introduced - the National qualification examination was introduced	—
10.	Type and form of studies	—	—
11.	Duration of implementation	—	—
12.	Language of implementation	—	—
13.	Workload of the StP (CP)	—	In accordance with amendments to Section 1(8) of the Law on Higher Education Institutions, which entered into force on 11 October 2022, the transition to the European Credit Transfer and Accumulation System will be implemented until 31 December 2024.
14.	Admission requirements	—	—
15.	Degree to be awarded	—	—
16.	Qualification to be awarded	—	—
17.	Place of implementation	—	—

Table 1 shows that the changes made to the study programme “Supervision” affect the procedure of National degree examinations – a National qualification examination has been introduced, where

students demonstrate their qualification in supervision.

**3.1.2. Analysis and assessment of the study programme compliance with the study field. Analysis of the interrelation between the code of the study programme, the degree, professional qualification/professional qualification requirements or the degree and professional qualification to be acquired, the aims, objectives, learning outcomes, and the admission requirements. Description of the duration and scope of the implementation of the study programme (including different options of the study programme implementation) and evaluation of its usefulness.**

Supervision is related to the application of pedagogy, healthcare, management, psychology in counselling. The field of study at StP was changed from "Education, pedagogy and sports" to the field of study "Health care". Supervision, as a modern form of support in professional activity, helps address dilemmas related to professional issues, promotes learning, raises issues related to wellness in the work environment, thus reducing burnout risks. Many professions and positions are involved in health care – medical personnel, medical support personnel, managers of medical institutions, which also determine diverse understanding and requirements for supervision (also so-called clinical supervision, supervision of managers). There are positions for which supervision is mandatory in various regulatory acts, such as psychotherapists, art therapists, social workers, clinical and health psychologists. In several professions, supervision is a mandatory part of the study process (so-called teaching supervision) (Regulations of the Cabinet of Ministers of March 24, 2009 No. 268 "Regulations on the medical competence of medical practitioners and students who study first- or second-level professional higher medical education programs and this the amount of theoretical and practical knowledge of persons"). Supervision is included in the standard of the nurse (general care nurse) profession as one of the opportunities for professional improvement (About the conceptual report "[On the further development of the nursing profession](#)" (likumi.lv; in Latvian only) The focus of supervision in the health care environment is the expansion / improvement of the knowledge of a practicing professional, helping to improve clinical skills, developing autonomy and self-assertion as a professional, thereby promoting professional compliance with healthcare practice standards/guidelines and ensuring the provision of quality healthcare services. In addition, supervision can strengthen employee skills such as teamwork and achieving common goals. Supervision can provide support in promoting the well-being of healthcare professionals, improve the microclimate and work culture in the structural unit, cooperation in the care process increases (see Figure 1. Effective supervision in the treatment environment).

Figure 1. Effective supervision in a therapeutic setting



The benefits and outcomes of effective supervision. Effective supervision has multiple benefits for both the supervisee and the supervisor.

Regular and systematic supervisions provide a favorable working environment, create a space/place for the professional to reflect on and develop his professional activity, to solve various dilemmas related to professional activity, thus reducing the risk of burnout. The purpose of supervision is to create a favorable environment aimed at development and professional improvement, in which it is possible to effectively solve current problem situations and improve team cooperation. As a result, areas in need of improvement are identified, training needs of employees are identified. In addition, supervision can help learn from mistakes, streamline processes and avoid repeating them in the future, which promotes confidence and improves service delivery.

As a result of mastering StP a professional Master's degree in pedagogy (Mg. Paed.) and a supervisor's qualification is obtained. The **aim** of StP to ensure professional studies that are theoretically well-grounded and can be applied in practice to prepare highly skilled supervisors, who could compete in the changing socio-economic conditions and the international labour market, according to the professional higher education standard, guidelines of the Association of National Organisations for Supervision in Europe ([ANSE](#)) and the [Supervisor's professional standard](#) (only in Latvian).

**Tasks** of professional Master's study programme "Supervision":

- to provide students with the opportunity to acquire professional knowledge, skills and competence in supervision, to prepare specialists who are able to effectively solve professional tasks in various professional environments, incl. in health care, to provide quality supervision services, to promote the development of the profession,
- create an understanding of the supervision needs of health care specialists, the models used in supervision, the principles of cooperation of multidisciplinary teams
- to deepen students' competence in research work, developing their ability to develop and implement research projects, to distribute the obtained data to the wider public,

- promote students' participation in research (projects, conferences, publications) and prepare them for further studies in doctoral studies.
- promote students' motivation to responsibly and systematically improve their qualifications and professional development,
- To promote the competitiveness of StP graduates in the current socio-economic conditions and in the international labour market.

Aims and tasks of StP correspond to the aim and [Development Strategy](#) of RSU, they are formulated in cooperation with professionals and employers. **Learning outcomes** of StP are described based on the aims and tasks of StP that are defined in the form of knowledge, skills and competences:

#### *Knowledge:*

After completed study programme, the students will have acquired comprehensive and specialised knowledge and understanding allowing them:

- to compare and evaluate the different concepts, types, shapes and models of supervision and their development trends today,
- to describe adult education theories, models and methods in the context of supervision,
- apply appropriate supervision models in certain professional environments - (including health care)
- create an understanding of the supervision needs of health care specialists, the specifics of work, the roles and tasks of multidisciplinary teams
- to define and describe the supervision process, the learning outcomes and its assessment individually, in a group, in an organisation,
- to describe and justify supervision methods and techniques for work individually, in a group, in an organisation,
- to define and describe research methodology in supervision.

#### *Skills and competences:*

As a result of completing the study programme, students will be able:

- to assess the professional difficulties, needs and resources of the supervisee individually, in a group, in an organisation and to plan the process of supervision and the learning outcome,
- to apply appropriate methods to a person, group or organisation in the process of supervision, creating a creative, structured environment and based on adult education models,
- to develop the supervisees' skills of self-assessment, self-reflection and self-regulation, as well as their analytical skills that help to solve professional problems independently,
- to analyse and evaluate the development and efficiency of the process of supervision, to draw up the supervision documentation,
- to promote own professional development in a targeted manner, to improve own qualifications,
- to plan and conduct research to develop the theories and methods of supervision.

#### *Competence:*

As a result of completing the study programme, students will be able:

- independently organize, administer and manage the supervision process at the individual, group, team and organizational level, understanding the professional environment - incl. health care specifics and apply appropriate methods,
- to provide qualified service to health care organizations by performing supervisions individually, in groups, in teams and at the organizational level

- provide support and recommendations to healthcare professionals to improve work performance
- to independently draw up the documentation related to supervision, taking into account legal employment relations, personal data protection and occupational safety regulations,
- to independently plan and conduct research activities in accordance with the basic principles of research to develop the supervision theory and practice,
- to implement in practice ethical responsibility, understanding potential impact of one's activities on an individual, group, team or organisation.

The learning outcomes of the study programme are coordinated with the Supervisor's profession standard and formulated in conformity with the description of the knowledge, skills and competences of level 7 of the EQF in the Latvian education classification.

Admission requirements:

There is no Bachelor level study programme available in Latvia, which would provide an opportunity to acquire the profession of supervisor. *Therefore applicants with a wide range of higher education in various sciences are admitted.* Admission requirements to be admitted to StP: Bachelor's degree or equivalent degree, or professional higher education with qualifications in the following thematic areas of education: Health care, Health care services, Social and behavioural sciences, Social welfare, Teacher training and education science, Business and administration, Humanities. The entrance examination in the study programme is a discussion regarding the motivation to study. Applicants of the study programme "Supervision" are admitted according to competition results formed by the assessment of the talk (motivation for studies). The information is available at in RSU website <https://www.rsu.lv/en/study-programme/supervision>.

Student admission is carried out in accordance with the Admission Regulations approved by the RSU Senate for the respective academic year and external regulations. According to Paragraph 3 of Cabinet Regulations No. 846 "Regarding Requirements, Criteria and Procedure for Admission to Study Programmes" of 10 October 2006, the rules for admission to study programmes (hereinafter referred to as the admission rules) for the next academic year shall be drawn up, approved and published (also on the website) each year by 1 November. The technical procedures of admission are established and described in Paragraph 7.1 of RSU Process Description No. 7 "Service Provision for Students". RSU applicants apply electronically on website <https://www.rsu.lv/en/study-here/admissions> StP applicants are enrolled based on results of the competition formed by interview assessment.

The duration of StP implementation is 2 years (4 semesters) and the total number of credit points obtained in study courses is 80. This is consistent with the aims set for StP.

Enclosed:

Annex 24.1. Model diploma and supplement thereto.

Annex 24.8. Sample study contract.

### **3.1.3. Economic and/ or social substantiation of the study programme, analysis of graduates' employment.**

Supervision is advisory and educational support received by an individual, group or organisation in professional context in order to improve their professional competence, professional performance

quality and foster professional growth[1].

Latvia is one of the few European countries, where the supervisor's profession is developed as an independent profession. In 2014, the profession supervisor/consultant supervisor was included in the Classification of Occupations. The supervisor's profession standard was revised and supplemented in 2019 in joint cooperation between the Latvian Association of Supervisors and three higher education institutions – RSU, RISEBA, Christian Academy.

The need for supervisions was recognised and integrated into the law even before the creation of the profession. The social work sector was one of the first. The Law on Social Services and Social Assistance, CM Regulations No. 291 of 03.06.2003 “Requirements for the Providers of Social Services”, CM Order No. 48 of 06.02.2013 “On the Concept of State Administration Human Resources Development” provide that advisory supervisor service should be provided in public administration. The need for supervisions was integrated in the Professional Social Work Development Guidelines 2014-2020. Thanks to the study programmes preparing by supervisors in Latvia, the supervision service, became more accessible as well as the public and various institution have become more aware of its necessity. In 2017, the Ministry of Welfare developed project “Professional Social Work Development in Local Governments” No.9.2.1.1/15/I/001. Within the framework of this project, regulations were created for provision of the supervision service to social work specialists of local governments. It is included in these regulations that, at the choice and needs of each particular local government social service, supervisions may be carried out in different forms – individually, in a group, in a team or in an organisation and not less than 21 h per year.

The Latvian School of Public Administration has already been offering a supervision service since 2014, to increase the competence of the professionals involved in the work of the Public Administration.

Thanks to the European Social Fund [project No. 9.1.3.0/16/I/001 “Increasing the Efficiency of the Resocialisation System”](#), 2017, supervisions were provided to employees of the Prison Administration and State Probation Service.

In particular, several major projects should be noted directly in the educational environment. A large project was launched in 2018 thanks to the State Education Quality Service. Within the framework of [ESF project No. 8.3.4.0/16/I/001 “Support for reducing early school leaving”](#) (“PuMPuRS”), more than 1000 supervisions have been implemented in Latvian schools participating in the project at this moment and a total of 1330 supervisions (each supervision 3 h) have been planned for school teachers and support staff. However, the [ESF project No. 8.3.5.0/16/I/001 “Career Support in General and Vocational Education Institutions”](#) (Latvian only) implemented by the State Education Development Agency provided 40 supervision teachers – career consultants.

The need for supervisions was also determined by the impact of the COVID-19 pandemic. The Ministry of Education and Science, in cooperation with the State Education Quality Service, implemented a support programme for teachers to mitigate the consequences of the COVID-19 pandemic, within the framework of which teachers were provided with a group supervision. The purpose of the supervisions was to provide teachers psychoemotional support, mitigate burnout risks, learn self-help and self-management techniques and approaches.

Thus, supervision becomes a demanded service in an educational environment that provides professional improvement and psychoemotional support.

In addition to the projects mentioned above, supervision is also implemented in business, local governments and the public sector. Supervision as one of the forms of lifelong learning ensures the development of human capital, which is one of the most important priorities set out in the



Sustainable Development Strategy of Latvia until 2030 (Latvia 2030).

Supervision is included in the general care nursing profession standard as one of the types of professional development.

The need for a supervision service is actualized in various professional environments and this is also shown by the research conducted within the Master's thesis of StP.

The specifics of the supervisor's work determine that the supervisor is an "external" specialist hired by the organization or individual as needed. Graduates of the program create various forms of business (self-employed, etc.) in order to realize their practice in accordance with the legislation established in Latvia. Graduates of the program are involved in all the above-mentioned supervision service provision projects and also provide supervision services to individual professionals (e.g. art therapists, physiotherapists, nurses).

[\[1\] supervision - National Encyclopaedia \(enciklopedija.lv\)](#)

**3.1.4. Statistical data on the students of the respective study programme, the dynamics of the number of the students, and the factors affecting the changes to the number of the students. The analysis shall be broken down into different study forms, types, and languages.**

There has been admission to StP since 2014. Admission takes place during summer admission in July, August. No state-funded study places have ever been provided in StP. Tuition fees have been gradually increased and currently reach 2000 euro per year. Students are offered the opportunity to use the ERASMUS programme for mobility, but given that there are only a few similar courses in Europe and given the specific nature and intensity of StP courses and the fact that StP is studied by professionals from different fields, this opportunity has never been used.

The increase in the number of StP students has been observed since the existence of the study programme. Unfortunately, about a third of students stop studying after the first semester. The main reason is the inability to combine work, private life and study load. The reason for expelling "due to academic failure" is very rare. Not all students complete StP in 2 years. Some (1-2 each year) take the opportunity to take academic leave. The most common reasons are family circumstances, social conditions (difficulties to combine studies with workload), as well as financial difficulties. StP was not opened in 2022 because the number of students set by the university was not reached (24).

Enclosed:

Annex 16. Statistical Data on Students.

**3.1.5. Substantiation of the development of the joint study programme and description and evaluation of the choice of partner universities, including information on the development and implementation of the joint study programme (if applicable).**

## 3.2. The Content of Studies and Implementation Thereof

**3.2.1. Analysis of the content of the study programme. Assessment of the interrelation between the information included in the study courses/ modules, the intended learning outcomes, the set aims and other indicators with the aims of the study course/ module and the aims and intended outcomes of the study programme. Assessment of the relevance of the content of the study courses/ modules and compliance with the needs of the relevant industry, labour market and with the trends in science on how and whether the content of the study courses/ modules is updated in line with the development trends of the relevant industry, labour market, and science.**

Professional Master's study programme "Supervision" is a full-time study programme, which provides for 40 academic hours of work per week. Regular and/or remote lectures and classes take place on Fridays and Saturdays. The average number of contact hours per week is 17-18. A significant part of studies – 22-23 hours per week on average – consists of students' independent work individually and in groups, including strengthening of lecture materials by systematically reading the specified sources, doing written tasks, independently preparing for practical classes.

The two-year StP includes basic courses and advanced knowledge courses in specific areas. They mainly are compulsory part A courses, 1 elective B course and 1 free elective C course. Courses of part A ensure learning the required theoretical and practical knowledge in supervision, pedagogy and research. The implementation of these courses is ensured by one of RSU academic structural units, mainly departments. Most of courses (17) are implemented by the RSU Department of Health Psychology and Pedagogy.

In the first year of studies, students take the following study courses:

### **Part A courses:**

"Supervisor's Professional Work", "Counselling and Problem-Solving Methods in Supervision", "Individual Supervision", "Supervision in Groups", "Intervision Group", "Supervisor's Personal Qualities", "Supervision of Teams and Organisations", "Psychodynamic Concepts in Supervision", "Technology-enhanced Learning and Teaching in Adult Education", "Placement 1", "Placement 2", "Placement 3", "Health Behaviour", "Research Methodology". Previously also the course "Theories and Methods of Adult Pedagogy".

### **Part B courses:**

"Civil and Environmental Protection, First Aid", "Self-Efficacy and Self-Regulation".

Study courses to be mastered in the second year of studies:

Part A courses;

"Intervision Group", "Placement 4", "Master's Thesis", "Research Data Analysis".

Visibility in the acquisition of theoretical and practical knowledge is ensured by digitalisation of the study process, introduction of different tools for diversification of type of studies (e.g. conducting remote supervisions in classes, demonstrating the use of different methods/tools in online counselling). On the basis of the results of the student survey on the need to include more practicality, particular emphasis is placed on diversifying the methods and forms of classes. This

ensures the maximum possible preparation of students for different situations specific to the supervision.

The application of simulations in the study process facilitates the connection of the knowledge acquired in the study courses with the acquisition of professional skills:

1. skills training in the “student-student” form,
2. participation in observation of real supervisions,
3. analysis of video examples

Each description of the study course reflect the content of lectures and their association with practical classes. Assessment criteria have been developed and described for each study course, with which students are familiarised at the beginning of the study course. The study course description sets out the learning outcomes of the course, identifies the knowledge, skills and competences to be acquired. Some courses are also accompanied by descriptions of the skills to be learnt, links to a demonstration of video examples of the skills to be learnt. A description of the skills to be used in counselling and the creation of video examples was implemented thanks to the provision of project SO 8.2.3..0/18/A/011 to RSU. Course descriptions (in RSU e-learning) are updated, renewed and modernise every year before the course starts.

In semester 4, students complete and defend their Master’s thesis. The aim of drafting the Master’s thesis is to provide students with the opportunity to demonstrate in practice the knowledge and practical skills acquired during their studies in research, as well as to update the topics relevant to the field of supervision, to research into them and to familiarise the public with research data or products/tools created. The Master’s thesis demonstrates a student’s competence in the chosen topic. In their Master’s thesis, students demonstrate their skills in planning, conducting and directing research, including obtaining and processing data, analysing the results of the study, and their ability to interpret the findings and present them to the wider community. Thanks to the annual international conference organised by the RSU Department of Health Psychology and Pedagogy “Health and Personality Development: Interdisciplinary Approach” enables students to present their research at a conference, thus developing the ability to present and discuss research results.

Placement is an important part of studies, is it is implemented within the framework of 4 study courses (for more detailed description of student placement see section 3.2.4).

The knowledge, skills and competences reflected in study course descriptions ensures in a purposeful way the achievement of the aims and learning outcomes of StP, because graduates:

- demonstrate a wide range of knowledge, skills and competences in supervision, including find their way in recent scientific achievements,
- apply the latest digital technologies to adult education and counselling,
- demonstrate the ability to discuss with arguments contemporary developments in supervision, and are able to offer innovative solutions in scientific activity and business,
- carry out scientific research both independently and in cooperation,
- develop business by providing a supervision service and engage in the activities of professional organisations (*LAS (Latvian Association of Supervisors)* and ANSE (*Association of National Organisations for Supervision in Europe*)).

Achievement of StP learning outcomes is ensured by successive mastering of study courses and a targeted set of study courses to be implemented. The analysis of mutual compliance of mapping results of StP study courses and compliance with the knowledge, skills and competences specified in supervisor’s profession standard confirm the significant contribution of each study course to the achievement of the learning outcomes of the programme knowledge, skills and competences.

Enclosed:

Annex 17.1. Compliance of the Study Programme With the National Educational Standard.

Annex 17.2. Compliance of the study programme with the industry-specific regulations.

Annex 18.1. Mapping of the Study Courses for the Achievement of Learning Outcomes of the Study Programme.

Annex 18.2. Compliance of the qualification to be acquired upon completion of the study programme with the professional standard

Annex 19. Planning of the study programme (for each type and form of the implementation of the study programme).

Annex 20. Description of Study Courses.

**3.2.2. In the case of master's and doctoral study programmes, specify and provide the justification as to whether the degrees are awarded in view of the developments and findings in the field of science or artistic creation. In the case of a doctoral study programme, provide a description of the main research roadmaps and the impact of the study programme on research and other education levels (if applicable).**

Supervision has three main functions: administrative, educational and support. Education is an essential component of supervision, requiring a supervisor to know different learning and teaching methods based on knowledge of adult pedagogy. This determines the justification for the degree to be obtained in pedagogy.

**3.2.3. Assessment of the study programme including the study course/ module implementation methods by indicating what the methods are, and how they contribute to the achievement of the learning outcomes of the study courses and the aims of the study programme. In the case of a joint study programme, or in case the study programme is implemented in a foreign language or in the form of distance learning, describe in detail the methods used to deliver such a study programme. Provide an explanation of how the student-centred principles are taken into account in the implementation of the study process.**

StP courses are mastered in lectures, classes, tutorials, independent work and placement. A great emphasis in the study process is placed on independent work of students implementing it both individually and in teams. Particular emphasis is placed on the use of interactive methods (incl. the use of digital solutions) in the study process, active participation of students in discussions, thus developing skills that are important for the supervisor's profession – ability to reflect and ability to cooperate. Lectures can be implemented in the regular or online format. Some courses have recorded video lectures, which students can watch at a time convenient for them. In accordance with the didactic requirements of modern higher education institutions, use of more active teaching methods in lectures and classes is highlighted in the study programme. To develop the students' professional knowledge and skills, interactive methods (including individual work and work in small

groups), like discussions, case studies, role playing, cooperative learning, project development and presentation, educational studies, etc. These teaching methods are selected according to the aims, tasks and learning outcomes of the study programme, as well as the specifics of the study material in each particular study course. The goal of the chosen methods is to develop the ability of the students of Master's study programme to describe and critically analyse situations and problems, applying theoretical knowledge and practical skills, to logically assess future development of a situation and take decisions to deal with problems, to develop the ability to work individually, in a group and a team.

An accurate description of the skills and viewing of video examples serve the development of counselling skills, which allow analysis of both language use and non-verbal expressions.

Students are given the opportunity to attend conferences at RSU. When attending conferences, students are given a specific task within the scope of each study course, which is linked to the learning outcomes of each particular study course.

Lecture materials (video recordings, presentations, list of mandatory and recommended readings, list of other useful sources) are available to students on the e-learning website of each course. To facilitate navigation and perception, websites have been designed using the same principle and include key information about the course (message to students, information on the format of lectures/classes, information on tutorial times, information on examinations and assessment criteria, accurate reflection of topics to be learnt in the course, there is a news forum, appropriately drawn up references, links to RSU repository).

The courses are also implemented using a personalised approach, i.e. each student can express their creative and innovative potential both in the selection of research topics of interest to him/her and in the way papers are presented (for example, writing lessons learnt from a conference as a poem or singing as a song).

This facilitates a student-centred approach, where the lecturer is a coordinator, who assists the student in finding the necessary information, encourages the evaluation of sources of information, provides the necessary guidance. Students learn independently and responsibly, at the same time developing knowledge in mutual cooperation among students, as well as in cooperation with lecturers.

The forms of independent work vary from one course to another, which makes it possible to keep originality, interest, and also promotes learning and research of different forms of learning in practice (e.g. creation of an essay, blog on supervision, interviewing of working supervisors, etc.).

Most courses have a cumulative assessment system in place that ensures that students are forced to learn the course content sequentially and continuously, as well as obtain continuous feedback from the lecturer. The purpose of the examinations is not only to assess, but also to provide the student with an understanding of the necessary development of appropriate knowledge and skills. Test types motivate the students to work systematically, as well as to identify a lack of knowledge or skills in a timely manner. After the first year of studies, discussions are conducted with each student individually, during which feedback is provided on what has been observed during the study work and also during the student placements, recommendations are provided for further professional improvement, as well as the needs and recommendations of students are listened to. Such discussions are also organised in semester 4 after the end of placement and the examination "Placement 4". The purpose of the talks is to provide more feedback on the assessment, to provide recommendations for further professional development.

**3.2.4. If the study programme envisages an internship, describe the internship opportunities offered to students, provision and work organization, including whether the higher education institution/ college helps students to find an internship place. If the study programme is implemented in a foreign language, provide information on how internship opportunities are provided in a foreign language, including for foreign students. To provide analysis and evaluation of the connection of the tasks set for students during the internship included in the study programme with the learning outcomes of the study programme (if applicable).**

Placement enables students to get acquainted with different environments of professional activity, their specifics. Placement is organised in accordance with standards on professional Master's study programmes. Thanks to placement, students can strengthen the theoretical knowledge acquired in real work environments. The scope of placement is 28 CP and it is implemented in the first, second and third semester. Placement is regulated by the Placement Regulations approved at the Council of the RSU Faculty of Public Health and Social Welfare. When starting their placement, students are introduced to the placement planning, organisation, requirements, tasks, and documentation. Placement tasks are focused on the approbation of acquired knowledge by developing the skills needed for a supervisor: working on the individual, group, or organizational level. Course "Placement 1" (4 CP) is the first course (in semester 1), where students obtain practical experience. There is observation placement (observing supervisions conducted by a lecturer/supervisor and analysing them) in this course/ placement and also practice using the simulation "student-student". In the second semester, students conduct supervisions in the placement sites selected by them or offered by the university. Conducting individual supervisions min 6 h (study course "Placement 2" (4 CP)) and conducting group/team supervisions min 9 h (study course "Placement 3" (4 CP)). Students also participate in the National Qualification Examination of students in the 2<sup>nd</sup> year of StP as supervisees, thus supplementing the experience as supervision clients and gaining experience in observing the course of the examination and analysis of sessions. Within the scope of qualification placement (study course "Placement 4" (16 CP)), students organise and conduct individual, group and team supervisions in the amount of min 30 h. The placement includes: work with supervisees (to clarify/evaluate problems and needs, to set appropriate objectives of activity, to build a contract and cooperation process), to conduct supervisions, to complete placement protocols for each conducted supervision and to upload to the e-learning website where the lecturer provides feedback on the supervision process/protocols. Placement of students is supervised during regular classes (supervision of supervision). This form allows conceptualization skills to be developed – connecting practice with theory. At the end of each of those placement, the student draws up a written case study according to a defined form. The case study is presented and defended in the final examination. Such a form of organisation of placement also enables the lecturer to observe and identify the set of skills to be developed by each student, thus implementing a student-centred approach. Courses related to student placement are implemented by several lecturers. Regular covisions are organised for lecturers, within which lecturers ensure mutual circulation of information, are able to identify students' learning needs in a timely manner, provide mutual support. Discussions are organised with each student individually after semester 2 and semester 3 placements, during which feedback on what has been observed and recommendations for further professional development are provided.

The following documents confirm the performance of placement tasks:

- Protocols of conducted supervisions (they need to be uploaded to e-learning after each conducted supervision). Protocols have a certain form and structure. A study course lecturer

makes comments in protocols in e-learning, thus helping the student to analyse supervision sessions in a more diverse way, spot potential risks, and plan future sessions more successfully.

- A supervision case analysis that includes an analysis of the process of all conducted supervisions. The case study should be uploaded to e-learning and presented at the examination.
- Report on conducted supervisions, time spent on preparation, time spent on contract conclusion, etc.

Enclosed:

Annex 9. Description of the Organisation of Student Placement.

### **3.2.5. Evaluation and description of the promotion opportunities and the promotion process provided to the students of the doctoral study programme (if applicable).**

### **3.2.6. Analysis and assessment of the topics of the final theses of the students, their relevance in the respective field, including the labour market, and the marks of the final theses.**

Already from semester 1 students are guided in understanding of the research topics relevant to the supervisor's profession, familiarised with latest developments in the sector, most significant sources, which reflected the latest research. Since supervision in Latvia is a rather new profession, research is important for the development of the profession.

In 2020, two students supervised by Professor K. Mārtinsone defended their Master's thesis by using for equivalence their publications "Self-Assessment of Professional Competence of Supervisors of Latvia", "Self-Assessment of the Importance and Attainability of Supervisors' Ethical Competence in Latvia". The publications were indexed in international peer reviewed databases – CrossRef, Google Scholar, Worldcat.

In 2021, the edition of the international conference of Rezekne Higher Education Institution "Society. Integration, Education" included a publication "Use of information technology in telesupervision: data security" by a student and Professor K. Mārtinsone. The publication was equivalent to a Master's thesis. In cooperation with the Latvian Association of Psychologists, training was organised, where the student presented research results and conducted a training seminar on security of data in online counselling.

In 2021, students participated in the creation of a book "Remote Psychological Assistant and Counselling" [Prep. by Z. Gulbe] issued by RSU. The book includes two articles by students of StP "Supervision": "Aspects of Informed Consent and Security of Data" and "Digital Competence in the 21<sup>st</sup> Century".

Every year, several students participate in the international conference "Health and Personality Development: Interdisciplinary Approach" organised by the RSU Department of Health Psychology and Pedagogy and present their research. For example, research "Supervision Needs of Teachers of

Special Education Institutions”, “Supervision Experience of Social Workers Relating to Work with Disabled Persons”, “Supervision as a Form of Improvement of Professional Competence in Orphans’ Court Workers”, etc. The research topics selected by students reflect the topics of supervision in the professional environment and topics relevant to society in general.

A digital tool “3DEK” for use in online supervisions was created in 2022 within the vertically integrated project “Psychological Assistance and Self-Help” within the SO project 8.2.3 “Improvement of Governance Processes and Modernisation of Contents of Study Process at Rīga Stradiņš University” (No.8.2.3.0/18./A011). The tool was developed by two Master students supervised by the doctoral student Inese Paiča. Within the project, there was cooperation with the Latvian Academy of Art in the creation of a visual image of the digital tool. The digital tool “3DEK” was presented on 10 November 2022 also at the Supervision Days conference “Challenges of Changing Times: Abilities and Possibilities of Supervision” organised by RSU and RISEBA annually.

Cooperation with the State Revenue Service (SRS) in the provision of supervisions and the development of a study on the necessity of supervision to SRS employees started in 2022. The study is led by Prof. K. Mārtinsone.

Taking into account the topicality of the selected research topics, as well as active popularisation of data obtained, the research conducted may be considered a significant contribution to the development of the profession in Latvia.

Enclosed:

Annex 22. Topics of students’ final papers.

### 3.3. Resources and Provision of the Study Programme

**3.3.1. Assessment of the compliance of the resources and provision (study provision, scientific support (if applicable), informative provision (including libraries), material and technical provision, and financial provision) with the conditions for the implementation of the study programme and the learning outcomes to be achieved by providing the respective examples.**

For the implementation of courses of StP “Supervision”, students are provided with a comprehensive study process, using well-equipped auditoriums, the RSU Library (information in [Latvian, English](#)) with a wide and modern provision of open access textbooks and scientific literature, extensive availability of computer hardware and the internet, including provision of RSU e-learning environment and student information system (SIS-3). Free internet is available in the premises of the university, as well as publicly available computers with internet connection. Students can download licensed *MsOffice* and *SPSS (Statistical Package for the Social Sciences)* programs on their personal computers for free. Students have access also to the materials uploaded to the RSU Repository [E-Resource Repository DSpace \(DSpace.rsu.lv\) | RSU](#)

Every year, the range of textbooks and scientific literature is supplemented. Books for students are in open access at the RSU Library.

Various learning resources are available to students in e-studios – lecture materials, presentations, assignments, tests, video recordings of conferences and presentation materials, video recordings of



professional discussions, links to useful online learning materials. Examples of counselling skills videos available:

<https://panopto.rsu.lv/Panopto/Pages/Sessions/List.aspx?folderID=b60c2813-9e30-468a-8a19-ae60124806e>

The range of different methods required for counselling is purchased and supplemented annually (e.g. educational game "Roles of my team", associative cards "Your world", systematic counseling manual and practical material "Systemic counseling in five stages", emotion cards "Feelings, feelings, emotions", card set "Idea PITCH", personal development cards "52 steps up", Design thinking tool set, method-card set "Motivation . Values. Needs" etc.).

In the provision of e-resources for the supervision study program, five e-book databases and seven full-text databases of journals are available.

**E-books** in the field of supervision as well as research methods are available in the subscribed databases **ebook Academic Collection (EBSCO), Ebook Central (Proquest), AccessMedicine, ClinicalKey and SAGE Research Methods**. For example, the *ebook Academic Collection (EBSCO)* database contains 28,895 e-books in the "Health and Medicine" section, while *Ebook Central (Proquest)* has 21,885 e-books. The subscribed multidisciplinary databases *Ebook Central (ProQuest)* and *EBSCO eBook Academic Collection* offer a variety of publications from different publishers, industry ebooks that provide selected information results when searching for a wide variety of topics/keywords, for example *Ebook Central (ProQuest)* has 1,210 ebooks on the topic "Supervision" and *EBSCO eBook Academic Collection* has 1,252 ebooks when searching on the topic Supervisor, *Ebook Central (ProQuest)* has 527 e-books, and *EBSCO eBook Academic Collection* has 773 e-books. *The ClinicalKey* database has book sections "Health Supervision", "Supervision", "Health behavior", etc.

Full texts of **scientific articles** in medicine are available in the subscribed databases: **SAGE Premier 2023, Health Research Premium Collection (Proquest), MEDLINE Complete (EBSCO), BMJ Journals, Wiley Online Journals, Science Direct, Academic Search Complete (EBSCO)**. In Primo's unified search, 6,939 journal titles appear in the "Health Sciences" field, which also contains 5 journals with the keyword "Supervision" in their titles.

**Dissertations** from many countries of the world in various fields of science, including public health, are available in the database *ProQuest Dissertations & Theses Global: The Sciences and Engineering Collection*.

Students also have access to such **news and reference databases** as *Encyclopedia Britannica Academic Edition, Letonika, LETA news archive, Nozare.lv, News.lv (Lursoft)*.

The ebooks mentioned in the study programs – both purchased and from the subscribed databases – are collected in the [list of recommended study e-books](#) on the library's website (such sections as "Health management", "Research methods", "Supervision" etc. are available).

Enclosed:

Annex 23.1. Assessment of the informative and methodological provision regarding library resources for the implementation of the study direction "Health Care" in accordance with the requirements of the guidelines

### **3.3.2. Assessment of the study provision and scientific base support, including the resources provided within the framework of cooperation with other science institutes and higher education institutions (applicable to doctoral study programmes) (if applicable).**

Not applicable.

**3.3.3. Indicate data on the available funding for the corresponding study programme, its funding sources and their use for the development of the study programme. Provide information on the costs per one student within this study programme, indicating the items included in the cost calculation and the percentage distribution of funding between the specified items. The minimum number of students in the study programme in order to ensure the profitability of the study programme (indicating separately the information on each language, type and form of the study programme implementation).**

It is planned to finance the study programme from the resources of private and legal persons, setting the tuition fee for the Latvian flow of EUR 2100, and increasing to EUR 2400 in the following years, when analysing demand restrictions. The demand for the study program for the currently established study fee, which corresponds to the actual costs per student, is not sufficient to complete the minimum set size of student groups for admission, so students have not been admitted in recent years. State budget funding is not provided in this study program. Enrolment in the study program will be resumed only on the condition that the necessary funding is found for the additional study fee to cover the actual costs of the study program.

The number of students planned to be achieved in two years of studies is 25 students, enrolling 13 students in the first year, with the number of students remaining unchanged in the second year. Following high inflation and under conditions of a rapid increase in prices of energy sources, the costs of the study programme exceeded income, but the situation stabilises in the long term when the tuition fee is revised.

The funding is used for staff remuneration, attraction of visiting university lecturers, taxes, maintenance of IT infrastructure, purchase of equipment and devices and study visit costs. In addition to the direct costs of the implementation of lectures and classes, the StP must cover the infrastructure maintenance costs (facilities, IT solutions) and other RSU common resources used in StP (Student Service, Library, organisation of the study process, grant for the Student Union and other support and administrative functions).

StP is implemented by the RSU Faculty of Public Health and Welfare Department of Health Psychology and Pedagogy and Department of Nursing and Obstetric Care, Faculty of Medicine Statistical Unit and Department of Clinical Skills and Medical Technologies, and CEG Unit for Continuing Education of Academic Staff. Remuneration of the academic staff in the first year of StP is planned to be approximately 27 thousand EUR.

Table 2. **Information on student costs**

Name	Result with the existing tuition fee	Result with the projected tuition fee
Average income per student, EUR	2100	2400
Average cost per student, EUR	4499	4758

Academic staff, %	48	45
Department resources, %	3	3
Other direct expenditure, %	6	6
Fixed costs, %	3	3
Overheads, %	40	43

### 3.4. Teaching Staff

**3.4.1. Assessment of the compliance of the qualification of the teaching staff members (academic staff members, visiting professors, visiting associate professors, visiting docents, visiting lecturers, and visiting assistants) involved in the implementation of the study programme with the conditions for the implementation of the study programme and the provisions set out in the respective regulatory enactments. Provide information on how the qualification of the teaching staff members contributes to the achievement of the learning outcomes.**

Institutions and also scientific staff (researchers, lead researchers) meeting the requirements of the Law on Scientific Activity are involved for the implementation of the study programme "Supervision".

Lecturers (teaching staff) involved in the implementation of StP have the following qualification requirements: at least a Master's degree, but preferably a scientific doctoral degree in a science related to the course, pedagogical work experience, digital skills, preferable scientific activity in the relevant field of science and practical work experience in supervision (according to the content of the course).

A total of 23 lecturers (teaching staff) are involved in the implementation of the study programme "Supervision", 11 of them have a doctoral degree, 3 are candidates for a scientific degree, the other 9 have a scientific Master's degree. Almost half (10) of the lecturers involved in the implementation of the programme are also certified supervisors (Latvian Association of Supervisors) and practise the profession on a daily basis.

Name, surname	Academic position	Scientific degree/supervisor's qualification	Study courses or their sections
Kristīne Mārtinsone	Professor	Dr.psych., Mg. paed., Mg. Sc.sal. Certified supervisor	"Research Methodology", "Master's Thesis". Previously - "Supervisor's Professional Work"

Sandra Mihailova	Assoc. professor	Dr. psych., Mg. paed., Mg. sc. sal., Mg. Biol. Certified supervisor	"Supervisor's Professional Work"
Ivans Jānis Mihailovs	Assistant Professor	Dr. iur.	"Supervisor's Professional Work"
Velga Sudraba	Assistant Professor	Dr. med.	"Psychodynamic Concepts in Supervision" Previously - "Placement 1", "Individual Supervision", "Supervision in Groups", "Placement 4"
Nora Jansone-Ratinika	Assoc. professor	Dr. paed.	"Technology-enhanced Learning and Teaching in Adult Education".
Indra Majore-Dūšele		Mg. psych., Mg. sc. sal., Doctoral candidate. Certified supervisor	"Supervisor's Personal Qualities"
Aelita Vagale	Assistant	Mg. psych. Certified supervisor	"Counselling and Problem-Solving Methods in Supervision", "Intervision Group". Previously - "Placement 2", "Placement 3", "Placement 4".
Aira Aija Krūmiņa	Assistant Professor	Dr. chem., Mg. paed.	"Theories and Methods of Adult Pedagogy"
Kristaps Circenis	Assistant Professor	Dr. med., Certified supervisor	"Supervision in Groups", "Placement 2", "Placement 3", "Placement 4"
Anda Upmale-Puķīte		Mg. sc. sal., Mg. psych., Mg. paed. Certified supervisor	"Individual Supervision"
Līga Vaivade-Kalnmeiere		Mg. paed. Certified supervisor.	"Placement 1", "Placement 2", "Placement 3", "Placement 4"
Baiba Pumpiņa	Acting Assistant	Mg. paed. Certified supervisor	"Supervisor's Professional Work", "Placement 2", "Placement 3", "Placement 4"
Sanita Šuriņa	Lecturer	Dr. psych., Mg. sc. sal.	"Research Methodology", "Master's Thesis"

Inese Paiča	Lecturer	Mg. sc. Sal., doctoral candidate. Certified supervisor	"Master's Thesis" Previously – "Placement 2", "Placement 3", "Placement 4"
Sandra Liepa		Mg. paed.	"Supervision of Teams and Organisations"
Laura Miķelsone		Mg. paed. Certified supervisor	"Supervision of Teams and Organisations"
Diāna Kalniņa	Acting lecturer	Mg. Paed. Doctoral candidate	"Research Methodology", "Research Data Processing"
Anita Pipere	Acting Prof.	Dr. psych.	"Research Methodology"
Ivars Vanadziņš	Professor	Dr. med.	"Civil and Environmental Protection, First Aid"
Iveta Vigupe			"Civil and Environmental Protection, First Aid"
Oļegs Sabeļņikovs	Assoc.Professor	Dr. Med.	"Civil and Environmental Protection, First Aid"
Alīna Gēgerniece		Mg. psych.	"Health Behaviour"
Beate Evelīna Dišlere		Mg. psych.	"Self-Efficacy and Self-Regulation"

The lecturers involved in the programme regularly supplement their knowledge by participating in both the training organised by the RSU Centre for Educational Growth, the activities of professional organisations and the experience exchange trips abroad.

From 1 January 2017 to 1 October 2022, 15 lecturers of study programme "Supervision" participated in **continuing education activities** of the CEG attending more than 100 training activities of different content. In total, teaching staff of the Supervision study programme spent 1918 academic hours on continuing education activities. The teaching staff participated in the following CEG activities: Reference Management Tool EndNote; Remote Group Work of Students Using the Miro Tool; Creating Engaging and Interactive Classrooms through Active Learning Techniques; Collaboration and Partnership Towards Professional and Sectoral Development: Local, National, Transnational; Think Tank: Feedback as a Source of Cognition and Possibility for Self-Improvement; Interactive Presentations and Real-Time Feedback in the Mentimeter Tool; How to Create Effective Image and Text Compositions in Learning Materials; Research Methodology and Statistical Processing of Data; The Art of Speech in Pedagogical Work; Visualisation of Content in Presentations and many other.

Enclosed:

Annex 24.7. Analysis of the Composition of Teaching Staff.

### 3.4.2. Analysis and assessment of the changes to the composition of the teaching staff over the reporting period and their impact on the study quality.

During the reporting period, there were rather insignificant changes in teaching staff of StP "Supervision". Mainly in placement-related courses. There are also positive traits in replacement of lecturers – thus facilitating opportunities for students to experience different approaches and styles in supervision, to gain more versatile experiences through the experience stories of lecturers-practitioners. Given the specific nature of work of the higher education institution, it is difficult to attract the best professionals in some courses (e.g. "Supervision of Teams and Organisations"), who would have both practical work experience in the field and theoretical knowledge and pedagogical experience. However, we have been able to attract lecturers by appropriately dividing course topics and students believe that they have brought diversity.

RSU teaching staff – highly qualified professionals, both in academic work and field professionals (supervisors) – are mainly involved in the implementation of StP. Considering that StP is a professional master's study program, great emphasis is placed on attracting practicing professionals. Practicing supervisors are RSU lecturers: professor Kristīne Mārtinsone, associate professor Sandra Mihailova, assistant professor Velga Sudraba, assistant professor Kristaps Circenis, assistant Aelita Vagale, lecturer Inese Paiča, assistant p.i. Baiba Pumpiņa, as well as invited lecturers Līga Vaivade-Kalnmeiere, Laura Miķelsone, Anda Upmale-Pučīte, Indra Majore-Dūšele. In the Department of Health Psychology and Pedagogy, which profiles the program, the number of lecturers who obtained a doctorate degree or are candidates for a scientific degree increased during the reporting period, for example, Sanita Šuriņa defended her doctoral thesis, Inese Paiča is a candidate for a scientific degree. Indra Majore-Dūšele and Diāna Kalniņa are also applicants for a scientific degree. Instructors who worked on the board of the professional organization – Latvian Supervisors' Association – (Kristaps Circenis, Līga Vaivade-Kalnmeiere) are involved in the implementation of the training courses. During the reporting period, program graduates Laura Miķelsone, Indra Markova, Gunta Vītola, Līga Vaivade-Kalnmeiere were also involved in the realization of study courses. Graduate student Baiba Pumpiņa, who is also the director of StP "Supervizija", was hired to work as a lecturer at the Department of Health Psychology and Pedagogy.

The quality of studies/the content of study courses and the performance of lecturers are evaluated at the end of each study course, as well as in general after the completion of the study program. This process is organized by sending study course questionnaires. The obtained data are analyzed in the meetings of the lecturers of StP and also in the meetings of the department of health psychology and pedagogy.

**3.4.3. Information on the number of the scientific publications of the academic staff members, involved in the implementation of doctoral study programme, as published during the reporting period by listing the most significant publications published in Scopus or WoS CC indexed journals. As for the social sciences, humanitarian sciences, and the science of art, the scientific publications published in ERIH+ indexed journals or peer-reviewed monographs may be additionally specified. Information on the teaching staff included in the database of experts of the Latvian Council of Science in the relevant field of science (total number, name of the lecturer, field of science in which the teaching staff has the status of an expert and expiration date of the Latvian Council of Science expert) (if applicable).**

**3.4.4. Information on the participation of the academic staff, involved in the implementation of the doctoral study programme, in scientific projects as project managers or prime contractors/ subproject managers/ leading researchers by specifying the name of the relevant project, as well as the source and the amount of the funding. Provide information on the reporting period (if applicable).**

**3.4.5. Assessment of the cooperation between the teaching staff members by specifying the mechanisms used to promote the cooperation and ensure the interrelation between the study programme and study courses/ modules. Specify also the proportion of the number of the students and the teaching staff within the study programme (at the moment of the submission of the Self-Assessment Report).**

The director of the study programme is responsible for ensuring the interconnection of study courses and informing the lecturers regarding the learning outcomes of each course, as well as the necessary supplements. Since most of StP courses are implemented by lecturers of the Department of Health Psychology and Pedagogy, then the circulation of information is ensured at meetings/department meetings, during observation of teaching, in jointly implemented cooperation projects (presentations at conferences, cooperation in the development of students' Master's thesis projects, participation in annual Supervision Days events). The lecturers involved in the implementation of student placements meet regularly in covisions to bring attention to the matters related to study work.

# Annexes

III - Description of the Study Programme - 3.1. Indicators Describing the Study Programme		
Sample of the diploma and its supplement to be issued for completing the study programme	24.1._Diploms_Supervizija_eng.pdf	24.1._Diploms_Supervizija_lv.pdf
For academic study programmes - Opinion of the Council of Higher Education in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions (if applicable)		
Compliance of the joint study programme with the provisions of the Law on Higher Education Institutions (table) (if applicable)		
Statistics on the students in the reporting period	16_Anx_Stud_statistics_Supervision.pdf	16_pielik_M Supervizija_statistika_lv.pdf
III - Description of the Study Programme - 3.2. The Content of Studies and Implementation Thereof		
Compliance with the study programme with the State Education Standard	17.1_pielik_PMSP_Supervizija_atbilstiba_izglitiba_standartam_ENG.pdf	17.1_pielik_PMSP_Supervizija_atbilstiba_izglitiba_standartam.pdf
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard or the requirements for professional qualification (if applicable)	18.2_pielik_Prof_standarta_kartejums_Supervizija_ENG.pdf	18.2_pielik_Prof_standarta_kartejums_Supervizija_aizpildits.pdf
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)		
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	18.1_St_kursu_StP_rezult_kartejums_Supervizija_ENG.pdf	18.1_St_kursu_StP_rezult_kartejums_Supervizija_LV.pdf
The curriculum of the study programme (for each type and form of the implementation of the study programme)	19_Anx_Plan for full-time studies_Supervision.pdf	19_pielik_Supervizija_studiju programmas plans.pdf
Descriptions of the study courses/ modules	20_Anx_Study_course_description_Supervision.pdf	20_pielik_Kursu_apr_Supervizija.pdf
Description of the organisation of the internship of the students (if applicable)	09_Anx_pielik_Prakse_Supervizija_ENG.pdf	9_pielik_Prakse_Supervizija_lv.pdf
III - Description of the Study Programme - 3.4. Teaching Staff		
Confirmation that the academic staff of the doctoral study programme includes not less than five doctors, of which at least three are experts approved by the Latvian Council of Science in the branch or sub-branch of science in which the study programme intends to award a scientific degree (if applicable)		
Confirmation that the academic staff of the academic study programme complies with the requirements specified in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions (if applicable)		