APPLICATION

Study field "Health Care" for assessment

Study field	*Health Care*
Title of the higher education institution	*Latvijas Universitātes P.Stradiņa medicīnas koledža*
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Self-evaluation report

Study field "Health Care"

P.Stradins Medical College of the University of Latvia

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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,.

P.Stradins Medical College of the University of Latvia (further LU PSK) is an educational institution under the supervision of the University of Latvia, created in accordance with the August 24th, 2009 resolution #573 of the Cabinet of Ministers of the Republic of Latvia on the *Reorganization of P.Stradins Health and Social Care College* and December 28th, 2009 resolution #308 of the Senate of the University of Latvia. Thus, starting January 2nd, 2010, based on August 24th, 2009 resolution #573 of the Cabinet of Ministers of the Republic of Latvia, the college continues to exist as an "Agency of the University of Latvia "P.Stradins Medical College of the University of Latvia"", who is the successor to the rights and legal obligations, as well as property and record keeping proceedings of previous periods.

LU PSK operates in accordance with the Constitution of the Republic of Latvia, Law of Education, Law on Scientific Activity, Law on Higher Education Institutions, Law on Vocational Education and related regulatory enactments, LU PSK regulations and international norms of higher education.

Ever since its establishment in November 1st, 1939, LU PSK has changed its name numerous times (it started out as School of Merciful Sisters (Nurses) in P.Stradins Hospital, which was then called Riga 2nd Hospital, under the management of professor P.Stradins), and also its subordination status.

Despite changes in political system and subordination, within the 80 years of its existence LU PSK has proved itself to be an educational institution, that has been able to maintain its core values – by educating and providing the labour market of Latvia and European Union with competent, competitive, qualified specialists in the fields of healthcare and social welfare.

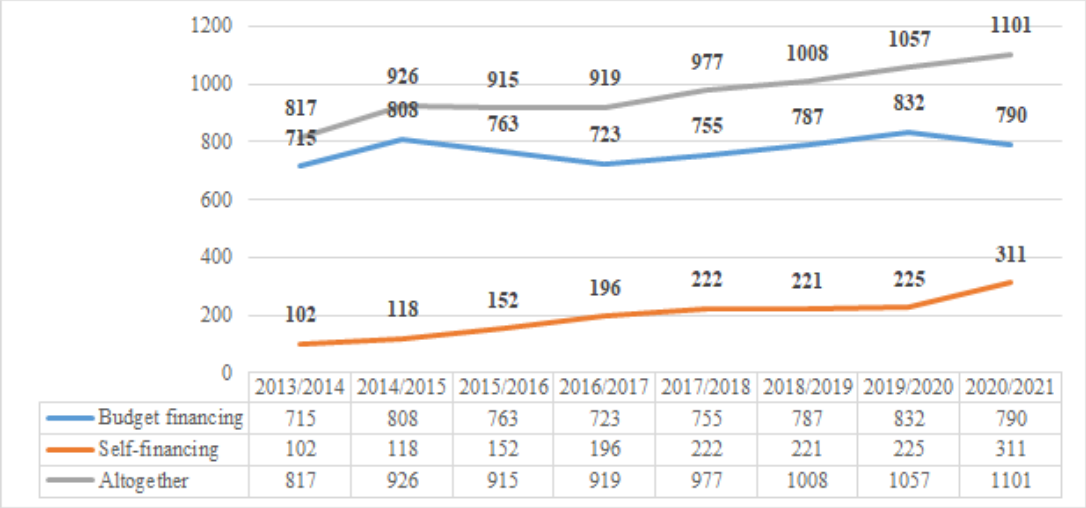
Vision: In 2021, LU PSK is one of the leading Medical Colleges in Latvia, competitive also in the Baltic Region and countries of the European Union.

Mission: LU PSK guarantees its students high quality Level 1 Professional Higher Education in the Jūrmala city and Latgale Region – the city of Rēzekne. In cooperation with professional associations and collaboration partners, LU PSK ensures development of study programmes in accordance with requirements of the labour market and latest technologies.

In study year 2020/2021 LU PSK realizes two fields of study: *Social Welfare* and *Healthcare*. LU PSK operates in Jūrmala – Vidus prospekts 38, where 9 study programmes are realized, and in its branch office in Rēzekne – N.Rancāna iela 23a, which since the academic year 2019/2020 sees realization of 4 study programmes *(Medicine, Nursing, Medical Massage, Social Care)*.

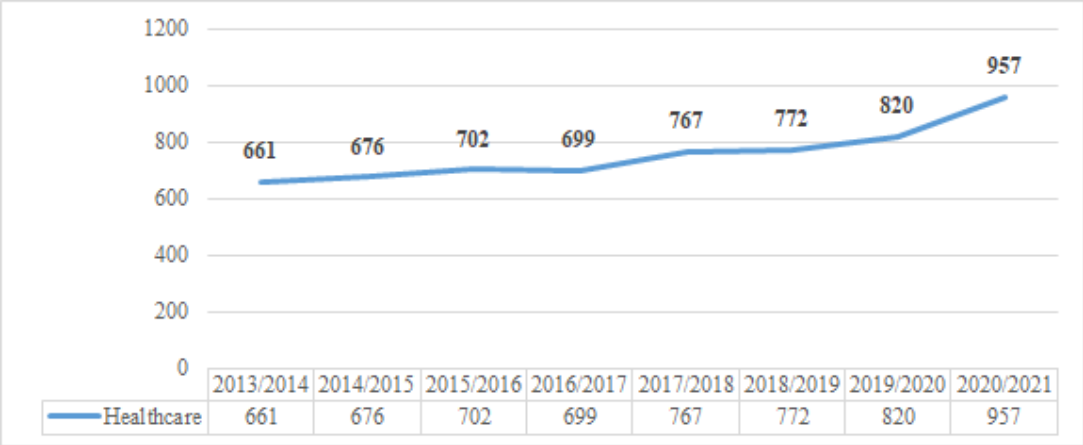
LU PSK in the 2020/2021 study year realized 9 full time attendance Level 1 Professional Higher Education Study Programmes: Social Care, Social rehabilitation, Biomedical Laboratory Technician, Radiographer, Podology, Medicine, Esthetic Cosmetology, Medical Massage, Nursing. The Nursing study programme realized in the reporting period is not registered for accreditation due to Order No. 537 of October 29, 2019 of the Cabinet of Ministers *Conceptual Report* "*On the Further Development of Nursing Profession*".

The dynamics of the number of college students in the reporting period is shown in image 1.1. and dynamics of the number of students in the *Healthcare* study direction is depicted in image 1.2.



	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021
Budget financing	715	808	763	723	755	787	832	790
Self-financing	102	118	152	196	222	221	225	311
Altogether	817	926	915	919	977	1008	1057	1101

1.1. ***The dynamics of the number of college students in the reporting period***



	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021
Healthcare	661	676	702	699	767	772	820	957

1.2. ***The dynamics of the number of students in the Healthcare study direction in the reporting period***

The aim of development planning is to promote sustainability and stable development of the LU PSK in order to implement the mission and vision of the University of Latvia and achieve strategic goals. Development planning is based on certain priorities and values, as well as basic principles of participation, coherence of interests, balanced development, cooperation, financial opportunities, openness, monitoring and evaluation, topicality and coherence of documents.

In accordance with the development strategy of LU PSK, following priorities have been set.

- Provision and development of the study process in accordance with the requirements of higher education regulations and the demands of the labor market.
- Ensuring and development of scientific research process in accordance with the requirements of regulatory enactments and trends in the world.
- Human resource development and renewal and succession of academic staff.
- Management of resources and finances.
- Internationalization and strategic collaboration.
- Development of lifelong learning and implementation of further education measures.
- Strengthening the image and visibility of the college.

These priorities are set in accordance with college mission, vision and quality policy, which includes excellence, sustainability and partnership. In accordance with the strategy of the LU PSK and, according to its priorities, the college has defined specific strategic goals and tasks, as well as deadlines, employees responsible and criteria for the results to be achieved.

The concept of strategic management processes of LU PSK determines the processes of the main activity, management processes and support processes. The core processes include study implementation processes, scientific research processes, processes of organizing further education events, ensuring international cooperation. Support processes are defined to facilitate basic processes, and these include personnel management, communication management, project management, document management, library maintenance and development, information security management, procurement management and infrastructure and work environment maintenance. The abovementioned processes are ensured by determining the main management processes, which are, strategic planning, management and analysis, financial planning and control, improvement and provision of the quality management system. The progress of the LU PSK operational processes is related to the strategic goals and tasks of development. LU PSK development strategy is available on the college server as well as in the secretariat.

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.

Self-governing institutions of the college are the college council, the director of the college and the academic arbitration court. Students of the LU PSK are represented in the main decision-making bodies by student self-government, whereas employees are represented by the trade union. The structure of college management is depicted in the 3rd annex.

1.1. table

Responsibilities and tasks of the college governance structures

LU PSK department/person responsible	Responsibilities and tasks
College Board	The Council is the collegial representation, management and decision-making body of the College's staff. The council consists of 11 council members: five persons elected to academic positions in the college, one representative of general staff, three representatives of student self-government, two authorized representatives of employers or professional organizations. The Council determines the main directions of academic activity, discusses and submits for approval the college medium-term operation and development strategy, work plan for the current year, annual report and total annual budget, discusses and submits for approval study programs and their self-evaluation reports, approves the composition of study program councils, approves the internal regulatory enactments of the LU PSK, nominates representatives in the institutions of self-government of the University of Latvia, supports and promotes the activities of student self-government.
College Director	The Director is a senior official of the College who exercises the overall administrative and economic management of the College and represents the College in all its affairs. The director is elected by the College Council on a competitive basis.
Academic Arbitration Court	The Academic Arbitration Court reviews: applications of students and academic staff regarding restrictions or violations of academic freedom and rights, disputes of an academic or ethical nature between the officials of the College, as well as the administrative institutions of the structural units that are in a subordinate relationship. The decisions of the Academic Arbitration Court are enforced by the administration. The Academic Arbitration Court is nominated by the General Meeting of the Academic Staff and elected by secret ballot from among the Academic Staff. Student representatives in the academic arbitration court are elected by the students' self-government. The Academic Arbitration Court consists of: two persons elected to academic positions, one student representative.

Student self-government	Student self-government operates in accordance with the regulations developed by it and approved by the college council. The student self-government has the right to request and receive information and explanations on issues that affect the interests of students from the college self-government institutions and heads of structural units. Representatives of student self-government in the college council have a veto right on issues that affect the interests of students. The decisions of the student self-government after their approval by the council are binding to all students of the college.
Assistant Director for Study Work	Provides management, supervision and control over the study process. Hired in accordance with external and LU PSK internal regulations.
Assistant Director for Research	Develops, creates and provides a creative support system for academic staff and students. Provides research work of study programs. Hired in accordance with external and LU PSK internal regulations.
Assistant Director for Legal Affairs	Provides quality legal support and resolution of legal issues. Hired in accordance with external and LU PSK internal regulations.
Academic Structural Units	Department of Medicine, Department of Medical Technologies, Department of Social Care. The department is a study and research work unit that participates in the development and implementation of study programmes. The department is headed by the head of the department, who is hired in accordance with external and internal regulations of the LU PSK. The head of the department coordinates the work of the department.
Communications Department	Ensures the availability of information complex to the public about the work of the college, coordinates the activities of the college in matters of external relations and information exchange.
Procurement Department	Provides college procurement activities and real estate management. The College Real Estate Manager is hired in accordance with external and LU PSK internal regulations.
Administrative Structural Units	Chancellery, personnel department, accounting, computer network administrators, library, archive.
Service Hotel	LU PSK service hotel provides 110 rooms. The service hotel is lead by a manager, who is hired in accordance with external and LU PSK internal regulations.

As an agency of the University of Latvia, LU PSK cooperates with the University of Latvia in several directions. The cooperation includes research, cooperation of lecturers, as well as coordination and approval of various documents important for the college. The college coordinates the goals of its strategic activity with the University, if the college develops new study programs, they must also be coordinated with the University of Latvia. The composition of the college council, budget distribution, annual work plan and self-evaluation reports are coordinated with the University of Latvia as well. The College participates in various conferences organized by the University of Latvia, and university representatives participate in conferences organized by the College. There is also close cooperation with lecturers in the implementation of study courses.

The trade union of the LU PSK has been a member organization of the Latvian Education and Research Workers' Trade Union since 2017. LU PSK professional organization is an independent and voluntary association of persons that expresses, represents and defends the labor, social, economic and professional rights and interests of its members in accordance with the Trade Union Law, other laws and regulations in force in the Republic of Latvia and its Articles of Association , which are specified in the norms of international law binding on Latvia. The aim of the trade union organization of the LU PSK is to unite the members of the trade union for joint action in order to express their opinions and defend their economic, social and professional rights and interests.

Every 5 years, the LU PSK trade union organization holds a re-election meeting, where the management reports on the funds made and spent and a new management is elected. The re-election procedure is specified in the Statutes of the Latvian Education and Research Workers' Trade Union. The current number of members is 41 and includes both academic and general staff.

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.

The quality policy of the LU PSK is a part of the internal quality assurance system, which is aimed at the implementation of the mission of the LU PSK and the achievement of strategic goals. It sets quality requirements as one of the most important goals of LU PSK.

The quality policy forms the framework for the implementation of the LU PSK development strategy and determines the common intentions and direction for ensuring and improving the quality of studies. The quality policy defines the level of quality as a degree to which the LU PSK implements the study process in accordance with the regulatory enactments of the Republic of Latvia, content-coordinated with Standards and Guidelines for Quality Assurance in the European Higher Education Field. It is oriented toward international quality standards, the needs and wishes of the parties interested in the operation of the LU PSK, as well as internal needs.

The aim of college quality policy is to implement study programmes in the fields of health and social welfare by preparing highly qualified, competent and competitive specialists in the labor market. Directions of action of the quality policy are closely related to development strategy of the LU PSK and the priorities set in it.

To realize quality policy, LU PSK:

1. builds on basic principles of quality policy - *competence*, to guarantee students access to quality education, *partnerships* to maintain active and effective long-term cooperation with stakeholders at both local and international levels, and *sustainability* to responsibly promote the development of quality education for society;
2. applies a process approach, which includes systematic process management and their interaction, in order to achieve planned results in accordance with the quality policy and the strategic direction of the LU PSK. The management of processes and systems as a whole is achieved through a Plan-Do-Check-Act (PDPR) cycle of risk-based thinking, taking advantage of opportunities and avoiding undesirable results;

1. ensures the involvement of every LU PSK employee in the maintenance and development of the internal quality assurance system. College faculty and staff regularly have the opportunity to express their views to promote quality improvement. It is possible to hear the views at weekly staff meetings, regular college and departmental study councils, annual discussions with staff, as well as by conducting staff surveys and evaluating the results;

4. obtains and evaluates the opinion of students, graduates and employers in order to promote evaluation, development and improvement of quality policy;
5. continuously evaluates achieved results and determines the necessary improvements based on self-assessments of LU PSK study fields, to continuously develop the activities of LU PSK in the interests of current and future students, employees, employers and other cooperation partners and society.

The structure of the internal quality assurance system is the defined sequence of activities and documented procedures (regulations, rules, methods, etc.) for the implementation and development of study quality, which reflects the responsibility of the LU PSK for the quality of education and ability to realize healthcare and social well-fare study programmes, in preparing competent and competitive professionals for the labor market.

The quality policy of the LU PSK promotes the development of a quality culture, to ensure achievement of sustainable results that meet the needs of all stakeholders for the continuous

improvement of the efficiency of the quality management system.

Quality policy is available publicly on the college web site: https://www.psk.lu.lv/en/about-college/documents (Only Latvian).

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.	The LU PSK Quality Policy formulates principles, goals and actions aimed at the implementation of the mission of the LU PSK and the achievement of strategic goals. The quality policy is implemented in accordance to the basic principles of competence, partnership and sustainability. Implementation of the quality policy is reflected in the description of the quality assurance system. The internal quality assurance system complies with the standards and guidelines of the European Association for Quality Assurance in Higher Education (ENQA) for quality assurance in the European Higher Education Area and the requirements of Latvian legislation. Implementing quality management provides a set of methods and activities in which quality is planned, implemented, evaluated and improved. Requirements of professional standards are taken into account to ensure the quality of study programs. The internal quality of the study programs included in the study direction is ensured by the head of the programme with teaching staff, whilst observing the study plan, program structure and content, based on the requirements of the professional standard and evaluating the study results achieved by students. Assessment of study quality is based on planning and cyclical assessment, both in terms of study program and direction.

2.	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.	Development, internal approval, supervision and periodic inspection of the study programs of the LU PSK takes place in accordance with the relevant external regulatory enactments of the Republic of Latvia and the Regulations of the P.Stradins Medical College of the University of Latvia. The development and approval of the study program takes place in the following order: 1. The study programme is developed and its independent expertise is organized by the department in cooperation with the Council of Study Programmes. 2. The department submits the study programme along with the expert opinion to the College Council for approval. 3. The secretary of the College Council submits the study programme to the Academic Department of the University of Latvia for further evaluation and approval, attaching an extract from the minutes of the council. 4. College study programmes are approved by the Senate of the University of Latvia. The minimum number of study subjects to be acquired within the study programs of the College, as determined by the regulatory enactments regarding the minimum requirements for educational programs for obtaining a professional qualification in the relevant profession. The annual evaluation of the existing study programs takes place in the report of the study field, to ensure the operation of the internal quality assurance systems of the study field
3.	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.	Study Regulations of the LU PSK determine the basic information about the study content and the organization of the study process. The procedure for examinations of study courses determines the types, form and course of examinations, as well as the rights and obligations of students and lecturers in the process of evaluating the results of the study course. The Regulations on State Final Examinations prescribe the procedure by which the state final examination for the acquisition of first-level professional higher education programs for award of a qualification and the issuance of a diploma is organized.

4.	Internal procedures and mechanisms for assuring the qualifications of the academic staff and the work quality have been developed.	The regulations of P.Stradins Medical College of the University of Latvia determine the duties and rights of the academic staff. Based on industry and global news, staff have the opportunity to propose and, with the support of the college, acquire knowledge, skills and competencies to improve their professional qualifications and quality of work. The mechanisms are closely linked to internal communication, annual discussions and questionnaires, as well as regular staff meetings. To ensure the professional development of the academic staff, the representatives of the academic staff participated in the project of the University of Latvia “Renewal of Academic Staff and Improvement of Competencies at the University of Latvia”
5.	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.	To evaluate the study process, organization, results, as well as technical provision, surveys of students and graduates are conducted in each study year. Also, in order to assess the knowledge of students and graduates in professional activities in internships and workplaces, an annual survey of employers is conducted. The results of the surveys are analyzed and evaluated at several levels: at the level of the study programmes, lecturers and study field. The course of surveys is determined by the Procedure of the LU PSK on Student Surveys for the Evaluation of the Study Process.
6.	The higher education institution/ college shall ensure continuous improvement, development, and efficient performance of the study field whilst implementing their quality assurance systems.	All activities of the internal quality system are observed In the LU PSK “Health care” study direction. The annual questionnaires and their analysis ensure continuous improvement, development and efficiency of the study field. Regular self-assessment reports summarize and analyze the activities performed, as well as the direction of re-accreditation, and provide not only local but also international assessment, checking the effectiveness of the quality assurance system.

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.

The aim of the study direction is to prepare competitive health care specialists for the Latvian and EU labor market, based on the requirements of the labor market and using modern teaching methods and achievements in research and science.

The aim of the study field is related to the development strategy of the LU PSK and the main activity of the college, which is determined by the quality and human resources policy. Quality includes excellence, sustainability and partnership. The human resources policy is determined by administrative and general staff, academic staff and students.

Changes in the study direction strategy are closely related to the state policy in health care and education:

- *Strategy of the Ministry of Health* (6.06.2019.,Nr.130) https://www.vm.gov.lv/sites/vm/files/data-content/vm_strategija_19_2011.pdf(Only Latvian)
- *Public health guidelines for years 2021 – 2027* https://www.vm.gov.lv/lv/jaunumi(Only Latvian)
- *Human resources in health care* https://static.lsm.lv/documents/oy.pdf(Only Latvian)
- *Information report on medium and long-term labor market forecasts,* https://www.em.gov.lv/sites/em/files/emzino_03062020-ar-pielikumiem1.pdf(Only Latvian)
- Sustainable Development Strategy of the Republic of Latvia for 2030.

The direction of development of the study programmes involved in health care direction at the LU PSK corresponds to the mission formulated in the strategy plan of the University of Latvia. There is a constant demand in the labor market for LU PSK graduates. The field of study implements the requirements set by the state and prepares the required number of specialists in the field of health care, as well as maintains direct communication with employers and professional associations. With an open labor market in Europe, health care programme graduates have an opportunity to find a job both in Latvia and other European Union countries.

According to the report of the Ministry of Economics on the updated medium-term labor market forecasts for the period until 2027 and long-term labor market forecasts until 2040, faster growth is expected in health and social care fields, due to the aging population and the negative impact on economic development of the coronavirus Covid – 19.

Labor market forecasts are based on economic development and demographic scenarios developed by the Ministry of Economics. They show possible labor market development trends and potential risks while maintaining the existing education system and the structure of education supply.

The Health Care Department of the University of Latvia will fulfill its mission and prepare the specialists necessary for health care, develop the quality of studies, strengthening the place of the University of Latvia in the common educational space of the European Union.

Potential of the study programs included in the direction of Social Welfare of the LU PSK contributes to the economy of Latvia and sustainable development of the society in Latvia. International cooperation is also implemented. *(2.1.tab.).* LU PSK implements first-level professional higher education programs in the fields of healthcare and social welfare, thus creating an opportunity for the population to acquire high-quality education, which complies with the European Union Directives and the needs of the labor market

2.1. table

List of study programmes

Number	Name of the study programme	Code of the study programme	Length of the study programmes	Mode/form of studies	Study credits (KP (ECTS))	Qualification to be acquired	Head of the programme
1.	**Medicine**	41721	3 years or 6 semesters	Full-time	120 KP	First level professional higher education, qualification to be acquired – **doctor's assistant (paramedics)** (2240 01)	*Mg.sc.sal.* Janeta Strazdiņa
2.	**Esthetic cosmetology**	41722	3 years or 6 semesters	Full-time	120 KP	First level professional higher education, qualification to be acquired – **beauty care specialist in cosmetology** (3259 04)	*Mg.sc.paed.* Inguta Grinberga
			3,5 years or 7 semesters	Part-time	120 KP		
3.	**Medical massage**	41722	2 years or 4 semesters	Full-time	80 KP	First level professional higher education, qualification to be acquired – **massage therapist** (3255 08)	*Mg.sc.paed.* Inguta Grinberga
			2,5 years or 5 semesters	Part-time	80 KP		
4.	**Radiographer**	41721	3 years or 6 semesters	Full-time	120 KP	First level professional higher education, qualification to be acquired – **radiographer** (3211 01)	*Mg.sc.educ.* Elita Rutka
5.	**Biomedical laboratory assistant**	41721	2 years or 4 semesters	Full-time	80 KP	First level professional higher education, qualification to be acquired – **biomedical laboratory assistant** (3212 03)	Mg.sc.biol. *Rūta Melbārde - Vāvere*
6.	**Podology**	41722	2 years or 4 semesters	Full-time	80 KP	First level professional higher education, qualification to be acquired – **podologist** (2269 06)	*Mg.sc.educ.* Aelita Koha
			2,5 years or 5 semesters	Part-time	80 KP		

Demographic changes in the world, increase in life expectancy and the consequent aging of the population are the main cornerstones of the development of social services. Social services will remain as one of the sectors with the largest workforce and, consequently, the demand for qualified professionals. Of general population in Latvia, 23, 3% are 65 years of age or older. Percentual increase from 2009 (17, 8%) is 2, 5% (Eurostat, 2020).

With the development and improvement of society, the healthcare sector in cosmetology is also developing. Today, innovative apparatus technologies, more complex procedures for skin care and solving skin problems are entering the field of beauty care. There is a growing need for highly qualified specialists in the field of cosmetology who are able to perform procedures professionally and educate clients skillfully. Their activities directly affect human health and safety. The education of a beauty specialist in cosmetology raises the prestige of the profession in society, as well as promotes personal and industry growth.

Population of Latvia in 2019 was 1919,968 inhabitants (https://www.csb.gov.lv(Only Latvian), 2020), taking into account that one or more laboratory tests are performed on every inhabitant of Latvia every year, approximately every second inhabitant in Latvia every year. Even several radiological examinations are performed and every third inhabitant of Latvia needs regular medical foot care, for which specialists are trained only at the LU PSK, the socio-economic basis of the programs included in the study direction and compliance with the needs of the national economy are clearly visible. In addition, there is a change in medical staff (retirement, burnout, change of profession, emigration, etc.).

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.

Evaluation of strengths and weaknesses of the study field is depicted in the table.

Strengths	**Weaknesses**
• Long-term experience in the implementation and development of study programs • High prestige of the profession in the EU market • Possibilities of realization of three study programmes only in our college • Possibilities of succession of study programmes in Latvian universities and abroad • Study opportunities in two regions of Latvia • State budget financing and implementation of self-financed study programmes • Stable cooperation with graduates and employers • Raising the professional and pedagogical qualification of lecturers • Active student self-government • Involvement of students in research • Experience in organizing postgraduate training • Recognition of the college within the framework of Erasmus "+" • Implementation of seven ESF continuing education projects • Participation in two international research projects	• Insufficient state budget funding according to the study profile • Insufficient remuneration in the industry • Insufficient level of foreign language knowledge for both lecturers and students • Low participation of lecturers in the implementation of research projects • Low number of lecturers with a doctoral degree • Lack of educational succession in Latvia for study programs Biomedical Laboratory Assistant, Podiatry, Medicine • Insufficient involvement of foreign guest lecturers in the study process.
Opportunities	**Threats**
• Cooperation with health care institutions in providing practice • Use of EU resources in the development of study programmes and material and technical base • Scientific - development of research activities within the framework of intermediate programmes • Organization of study courses available in the e-environment • Promoting the level of college education • Attracting foreign lecturers • Increasing own revenues, attracting financial resources	• Reduction of budget funding • Demographic situation in the country • Competition in higher education in the training of medical personnel • Contradictory state policy in the field of health education

To ensure continuous improvement of quality of the study process in the Healthcare field, the LU PSK has established a study field development planning system, which is implemented on the basis of regular self-assessment and identification of involved parties, including guidelines of external experts. During the process of elaboration of the development plan, it is imperative to assess development of LU PSK study programs, management, improvement of efficiency of internal quality assurance system, staff development, scientific research development, resource development, cooperation and internationalization development, all of which are the cornerstones in development of the LU PSK.

The intended study quality improvement activities are incorporated in the strategic planning document - **study direction development plan**, which reveals: development directions: study program content improvement, study process improvement, professional development of academic staff, scientific research activities, improvement and development of study environment, student self-government activity, communication with graduates of study programs, popularization of study programs, cooperation with Latvian and foreign higher education institutions, development and

implementation of new study programs, provision of professional development and further education possibilities; the goals to be achieved, the main tasks; the main persons or structural units responsible for the performance of tasks; intermediate deadlines / deadlines; results to be achieved / performance indicators.

Development plan of the *Healthcare* study field has two main directions, which are related to the study process and scientific research activities. The development plan includes conclusions of the SWOT analysis in order to improve the quality and operation of the study field.

Development plan in correlation with the study process includes: improvement of quality of the study process within the study programs; professional development of academic and general staff; popularization of the image of the college and attraction of applicants; promotion of cooperation with Latvian and foreign partners; improvement of educational succession; organization of further education courses and training; attraction of professionals in the implementation of the study process; attraction of foreign lecturers; improvement of technical provision. Development plan in correlation with research includes: development of scientific research activities among students and academic staff; scientific research activities within the framework of intermediate programs; scientific-research cooperation with the University of Latvia and medical colleges of the University of Latvia; participation of students and lecturers in European projects.

Based on the SWOT analysis, the College has identified priorities for action that are closely linked to improving vulnerabilities, reducing threats and seizing opportunities. In order to increase the level of foreign language knowledge for lecturers, the college offers to pay for foreign language courses for lecturers, as well as by giving lecturers the opportunity to participate in various international events, the level of foreign language can be increased. In order to increase the level of students' foreign languages, students are provided with foreign languages already during the study process. The administration of the college promotes the opportunities for lecturers to obtain a doctoral degree, helping with the payment of international publications and conferences, as well as supporting the adjustment of the lecture schedule to make it easier to attend doctoral studies. In co-operation with professional associations and other institutions related to the profession, the prestige of the profession is regularly raised, which may contribute to a larger number of budget places in the future, as well as to increasing remuneration in the industry. By expanding international contacts, it is possible to attract additional foreign lecturers.

It is possible to combat the threat by continuing to raise the prestige of the college and the quality of education, to continue educating highly qualified professionals. Continuously engage in discussions with public policy makers to maintain and improve health education policies.

The College constantly continues to improve cooperation opportunities both in Latvia and internationally. Thus, promoting various internships and study opportunities for students in institutions, as well as attracting international lecturers. The research activities of the inter-programs are improving every year and taking into account the wide number of study programs in the college, such research can be developed in different directions.

Covid-19 infection has contributed to the use of the e-environment in the organization of study courses and can be further developed. In order to continue to take advantage of the opportunities, the college is constantly improving.

Development plan of the study field (see appendix 4) foresees activities aimed at reducing weaknesses and potential threats and use of opportunities.

By an ordinance of the Director of the LU PSK, a working group is established to form a development plan of the study field. The working group consists of: head of the department, head of the study field, deputy director in study work, deputy director in research issues, head of

personnel department, representative from accounting, real estate manager, quality system project manager, library manager, external relations coordinator, public relations specialist, computer network administrator. After forming of a development plan of the study field, it is reviewed by the Council of Study Programmes and approved by the College Council.

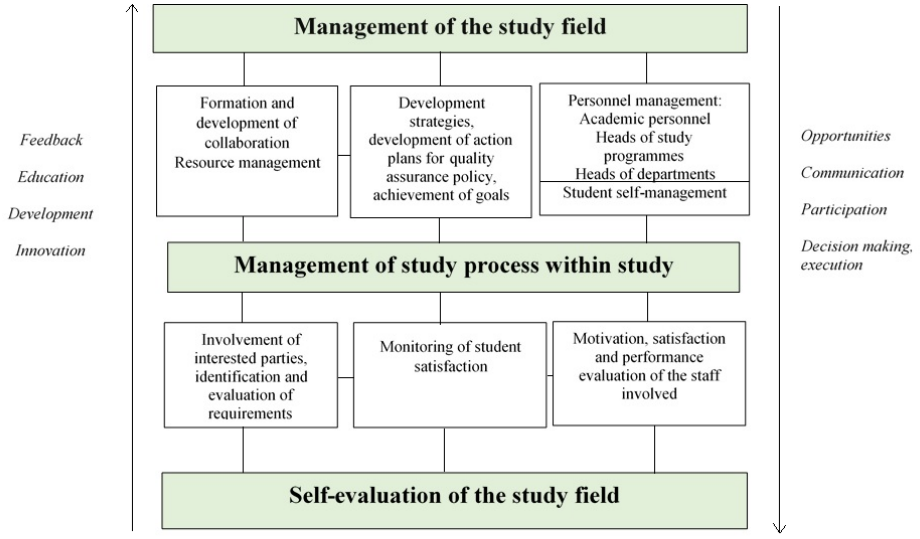
To ensure implementation of development plan of the study field, the head of the department / head of the structural unit / immediate superior/ employee responsible for the tasks cascades the tasks defined in the plan by departments / structural units to specific employees and provides feedback to the LU PSK management as regards completion of each task.

Development plan of the study field is regularly reviewed, in Autumn of each year the effectiveness of the measures taken is evaluated, problem situations are discussed, their solutions are envisaged, the possible impact of these solutions is evaluated and further necessary activities are determined in the action plan for the next (calendar) year. Development plan of the study field is approved by the college council and further submitted for approval to the LU senate.

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.

Management structure of the field (see appendix 5) and division of responsibilities allow to ensure development of the study field and existing programs in accordance with the development strategy of the LU PSK.

Management of *Social Welfare* study field takes place within the study programs and is focused on achieving effective goals in the study field. *(Pic. 2.1.)*. The study management plan is approved by the College Council.



Internal quality assurance of the study process

Pic.2.1. **Management model of the study field**

Management of *Healthcare* study field is implemented by a head of the study field, approved by the College Council and appointed by the director, who coordinates all work related to a specific study program and study field in general, based on changes in legislation, employers' requirements, recommendations made by students and lecturers as regards work experience in Latvian labor market, international experiences in various foreign forums, as well as in cooperation with foreign partners. Activity of the head of the study field is based on a democratic approach to solving issues related to the implementation of study programs in the study field, delegation of duties and responsibilities to lecturers and students.

The head of the study field observes the valid normative documents of the Republic of Latvia, normative acts of the University of Latvia, regulating the activities of the college, and internal normative documents of the college. The management of the Health Care study field is competent to make changes in the programmes of the field, supervision and control implementation of the programmes. The head of the study field submits the adopted decisions for approval to the Study Program Council. After coordination, documents are submitted for approval to the College Council.When creating new study programs or at the request of the University of Latvia, certain documents are submitted for approval to the Senate of the University of Latvia. Administration of the LU PSK is involved in the management of the study field, which performs administrative tasks related to the study process: staff planning and organization, financial provision and control, popularization of study programs, formation and development of international cooperation, as well as economic issues.

Administrative meetings (weekly), academic staff meetings (weekly), as well as electronic means of communication are used for information exchange and timely decision-making. All lecturers involved are invited to academic staff meetings (before the beginning or end of the academic year) to evaluate topicalities of the field and integrate them into the study process, as well as to evaluate professional contribution of lecturers in the study process.

The activity of the study direction is ensured at the Departments of Medicine and Medical Technologies of the LU PSK, and at the Rēzekne branch of the University of Latvia *(Table 2.2.)*. The study programme and the management of the department are ensured by the head of the department. Study programme managers involved in implementation of the field collaborate in evaluation of strengths and weaknesses of the field, planning of implementation of study programmes, reviewing content of study programmes, attracting teaching staff, collaborating with employers and places of practice.Competence of study programme managers is to ensure compliance of study programme content with regulatory enactments and improvement of study programme, in accordance with regulatory enactments, labor market and industry trends.

There are two study programme councils: Medicine study programme council and Study council of Medical technologies programme. The Study Programme Council is a collegial institution, in which the head of the department, delegated representatives from the academic staff, and a delegated representative of the student self-government from each study programme operate. The aim of the council is to promote the quality, efficiency and quality control of studies. Decisions of the Study Programme Council are implemented by the order of the college director or forwarded for consideration by the College Council.

Table 2.2.

List of structural units involved in the realization of the study field, their tasks in the implementation of the study field and specific study programmes

Structural unit/person responsible	Main tasks
Department of Medicine	• Ensures the teaching of general education study courses and branch study courses and provides consultations in programmes – Medicine, Esthetic cosmetology, Medical massage, and provides acquisition of study courses forming professional competence in other study field programs, in accordance with the given profile. Students are provided opportunities to develop professional competence/ attain the level of knowledge, skills and abilities in accordance with professional standards. • Students are provided with pre-clinical practices, consultations in laboratories of various profiles - chemistry / environmental examinations, microbiology, and offices - pre-clinical care rooms, emergency medical class, cosmetology class, manicure and pedicure class, massage class.
Department of medical technologies	• Ensures the teaching of general education study courses and branch study courses and provides consultations in programmes – Radiographer, Biomedical laboratory assistant, Podology - and provides acquisition of study courses forming professional competence in other study field programs, in accordance with the given profile. Students are provided opportunities to develop professional competence/ attain the level of knowledge, skills and abilities in accordance with professional standards. • Students are provided with pre-clinical practices, consultations in laboratories of various profiles – chemistry / environmental examinations, microbiology, clinics and biochemistry / hematology training laboratories and offices - pre-clinical care office, podiatry office, digital examination simulation class.
Secretary of the Department of Medicine **Secretary of the Department of Medical technologies** **Bookkeeper at the branch**	***1. Management of department records*** • to follow the instructions of the Head of the Department of Medicine / Head of the Department of Medical Technology, • to manage and arrange the record keeping of the department in accordance with the nomenclature - test and semester exam protocols, group transcripts, evaluation of the study process by semesters, practice agreements, study schedules, etc., • to prepare the necessary documents for ensuring the operation of the department using computer equipment, • to arrange the files in accordance with the approved nomenclature, to ensure their preparation and transfer to the archive, • to perform informative reference service in accordance with the documents of the department, • to ensure the acceptance of documents, registration, registration, control of execution, • to participate in the preparation and design of program accreditation materials, • to perform storage and transfer of minutes of study program council meetings to the archive, • to process and send correspondence. ***2. Responsibilities related to the admission of applicants:*** • to provide information about study programmes and study process, • to accept documents, to prepare contracts, to arrange files and transfer to the relevant structural units. ***3. Responsibilities related to students:*** • to accept student applications for consideration, etc. documents and provide certificates and confirmations about the study schedule, • to organize the admission of students, to promote the examination of students' requirements and proposals, • to prepare draft instructions - for study break, continuation of studies, practice, final examinations for exmatriculation, • to prepare and register student internship documentation - internship agreements, referrals, internship reports and evaluations, • to provide records of classes, lecture attendance, • to prepare diplomas and diploma supplements for issuance (technical preparation, making copies, systematization), • to draw up and transfer the case of the graduate to the archive.

The task of study support staff of the field is to ensure successful performance of the basic functions of the college. The support staff consists mainly of two groups: staff involved in the implementation of the study process - chancellery staff, library staff, IT specialists, procurement specialist, communications specialists and personnel responsible for the maintenance of the study environment and infrastructure in general.

During Covid -19 pandemic, professional contribution of an IT specialist to the digitalization of study process is of paramount importance. In distance learning process, support measures and improvement of knowledge in working with digital tools are organized for both students and lecturers, thus maintaining the quality of the study process.

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.

Since 2019, the College has been using Latvijas Augstskolu Informatīvā Sistēma **–** Information System of the Latvian Higher Education Institutions (hereinafter - LAIS), which ensures registration of college students and the course of studies by semesters from admission (matriculation) to exmatriculation. Such a decision was made to ensure safe and timely transfer of information to Valsts Izglītības Informācijas Sistēma - the State Education Information System (hereinafter - VIIS), as determined by the Cabinet of Ministers' *Regulations #276 regarding State Education Information System*, of June 25, 2019, and to enable students to gain personal access to information about their studies by semesters, observing the protection of personal data.

Admission of applicants to the LU PSK is regulated by:

1. Admission regulations for the current academic study year, which are developed on the basis of the Cabinet of Ministers *Regulations #846 on requirements, criteria and procedures for admission to study programs* of October 10, 2006:

1.1. by November 1 of the current year the College develops, approves and publishes (on the website) admission regulations for study programs for the next academic year;

1.2. admission to a study program is ensured by an admission commission established by the college, which operates in accordance with the regulations approved by the college;

1.3. for admission to the study program, the college organizes an open and equal competition in accordance with the college admission regulations. The aim of the competition is to select the most suitable applicants in the chosen study program. Selection criterion of the competition is the results of all compulsory centralized examinations passed on the acquisition of general secondary education.

The admission rules of the LU PSK can be found on the college website in the section Study opportunities / Admission rules.

(see: https://www.psk.lu.lv/studiju-iespejas/uznemsanas-noteikumi (Only Latvian)).

2. The procedure for starting studies in later stages of studies, developed on the basis of the Cabinet of Ministers *Regulations #932 on the procedure for starting studies in the later stages of studies* of November 16, 2004, is determined by:

2.1. studies at the College may be started at later stages in following cases:

2.1.1. when transferring from another higher education institution or college, or when transferring to a different study programme, or resuming studies after a break;

2.1.2. if, in accordance with the regulations regarding recognition of competencies acquired outside formal education, or professional experience and study results achieved in previous education, the knowledge, skills and competences acquired outside formal education or professional experience or study results achieved in previous education have been recognized.

2.2. studies may be started in later study stages by persons who have knowledge, skills and

competences acquired outside formal education and professional experience or learning outcomes achieved in previous education and credit points awarded, in accordance with the regulations on recognition of competences acquired outside formal education, or professional experience and learning outcomes achieved in previous education. Procedures for the assessment and recognition of competencies acquired outside formal education or professional experience and learning outcomes achieved in previous education can be found on the College's website in the section Students / Documents. (see: https://www.psk.lu.lv/studentiem/dokumenti (Only Latvian)). Said recognition is confirmed by a ruling on the part of the College as regards recognition of knowledge, skills and competences acquired outside formal education and professional experience, as well as learning outcomes achieved in previous education.

2.3. the decision regarding the recognition of knowledge, skills and competences acquired outside formal education or acquired through professional experience, as well as regarding the recognition of study results achieved in previous education is made by a Study Results Commission established by the college in each department. The commission for recognition of study results operates in accordance with the regulations approved by the college *Regulations on Recognition of Study Results of the LU PSK*. Decision regarding recognition of knowledge, skills and competences acquired outside of formal education or through professional experience, as well as regarding study results achieved in previous education contains the name of the study course and the credits allotted. Commission for recognition of study results examines issues related to:

- assessment and recognition of knowledge, skills and competences acquired outside formal education;
- assessment and recognition of knowledge, skills and competences acquired through professional experience;
- assessment and recognition of study results achieved in previous education.

College regulatory documents, which regulate recognition of study results are *Study Regulations* and *Procedures for the assessment and recognition of competencies acquired outside formal education or professional experience and learning outcomes achieved in previous education* can be found on the College's website in the section Students / Documents. (see: https://www.psk.lu.lv/studentiem/dokumenti) (Only Latvian).

Commission for recognition of study results consists of 3 (three) members who represent the academic and general staff of each department. The commission appoints a chairman and a secretary from among its members. Composition of commission for recognition of study results is coordinated by study programme council of each department. Composition of the commission is approved by an order of the Director of the College.

When regulations #505 of the Cabinet of Ministers as regards *Recognition of Competences Acquired Outside Formal Education or Professional Experience and Learning Outcomes Achieved in Previous Education* of August 14, 2018 came into effect, persons with previous experience were given the opportunity to obtain appropriate education in the chosen field in a relatively shorter time. *(table 2.3.)*.

Table 2.3.

Studies in later study stages in the reporting period

Studies in later study stages												
	Nursing	Nursing *Rēzekne branch*	Medicine	Medicine *Rēzekne branch*	Radiographer	Biomedical laboratory assistant	Podology	Podology *Personal financing*	Esthetic cosmetology	Medical massage	Medical massage *Rēzekne branch*	

2013/2014	3	4	4	3	1	-	-	-	2	-	-	
2014/2015	3	-	1	-	-	-	-	-	4	-	-	
2015/2016	19	2	7	6	-	-	-	-	2	8	-	
2016/2017	15	2	4	7	1	-	-	-	6	11	-	
2017/2018	15	6	7	3	-	2	-	-	-	7	-	
2018/2019	4	16	7	4	-	-	-	-	1	6	-	
2019/2020	18	6	2	6	-	2	-	-	6	3	7	**Total:**
2020/2021	5	27	6	9	1	-	-	-	7	6	6	
Altogether:	82	63	38	38	3	4	-	-	28	41	13	310

The college compares previously acquired subjects and their amount with the corresponding part of the college study program and indicates which from the previously acquired subjects can be credited, and in which additional examinations are to be taken. Subjects are credited if their amount in credit points in both comparable study programs is equal or the number of credit points in the previously acquired relevant subject is higher. The total amount of additional subjects to be taken may not exceed 20 credit points. Recognition of study courses in the reporting period is shown in table 2.4.

Table 2.4.

Recognition of study courses in the reporting period

Recognition of study courses												
	Nursing	Nursing *Rēzekne branch*	Medicine	Medicine *Rēzekne branch*	Radiographer	Biomedical laboratory assistant	Podology	Podology *Personal financing*	Esthetic cosmetology	Medical massage	Medical massage *Rēzekne branch*	
2013/2014	-	-	-	-	-	-	-	-	-	-	-	
2014/2015	-	-	-	-	-	-	1	-	-	-	-	
2015/2016	1	-	3	-	4	-	13	-	2	-	-	
2016/2017	1	-	-	2	7	3	12	2	-	4	-	
2017/2018	8	3	1	-	3	1	9	8	1	3	-	
2018/2019	9	-	3	-	-	4	4	2	5	5	-	
2019/2020	1	-	-	1	3	3	14	5	3	4	-	**Total:**
2020/2021	2	-	10	2	4	6	6	-	12	8	2	
Altogether:	22	3	17	5	21	17	59	17	23	24	2	210

Decision on concluding a study agreement with a person who wants to start studies in later study stages is made by the director, on the basis of recommendations of the head of the department. The College issues an order for matriculation in a certain semester, attaching a comparison decision on the recognition of knowledge, skills and competences acquired outside formal education or professional experience, as well as study results achieved in previous education and an individual study plan with additional requirements (subjects, examination deadlines), taking into account that the number of credit points obtained in the study year together with the additional subjects to be acquired does not exceed 40 credit points.

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.

College *Study Regulations* regulate the study procedure in the first level professional higher education study programmes implemented by the College. It has been developed in accordance with the *Law on Education of the Republic of Latvia, the Law on Higher Education Institutions, the Law on Vocational Education, the Regulations of P.Stradins Medical College of the University of Latvia* and the *Regulations of the Cabinet of Ministers on the State Education Standard of First Level Professional Higher*. The *Procedure for Examinations of Study Courses* developed by the LU PSK determines types, forms and the course of examinations, as well as the rights and obligations of students and lecturers in the process of evaluating the results of the study course.

Students can get acquainted with the success evaluation criteria, conditions and binding procedures on the College website (see: https://www.psk.lu.lv/studentiem/dokumenti). (Only Latvian)

Study courses have been developed in accordance with Regulations #141 of the Cabinet of Ministers on *First Level Professional Higher Education State Standard* and the *Professional Standard* of March 20, 2001. To ensure this, study programs have been aligned with the state education standard and the acquired education has been equated with the professional standard. To assess whether results of the study program are achieved with study courses, a mapping of the study courses to achieve the results of the study program has been carried out.

Acquisition of LU PSK study programmes is based on student-centered learning, teaching and assessment. Examination of students' knowledge and skills, to achieve competence, follows from the specifics of the study course and can be organized with the help of various examinations. During acquisition of each study course, the student must pass intermediate examinations specified in the study program: in the form of a test, report, presentation, practical work (manipulation simulation) or essay. At the end of the study course, the student takes a final examination (test or exam) of the study course. Different types of tests have been used to test students' knowledge and skills in examinations and tests: written, oral, computerized, in a combined form (for example, written and oral), in the form of an objectively structured clinical examination. Head of the study programme, in collaboration with teaching staff, plans and determines the study course examination schedule, ensuring an even and optimal study course final examination load.

At the beginning of each study course, lecturers inform students about the aim of the study course, topics to be acquired, expected results, knowledge evaluation criteria and independent studies: explaining the results of the supervised study course - knowledge, skills and competences; reflecting with which type of intermediate examination and final examination - test, colloquium, independent work, test, exam, etc. relevant knowledge, skills and competences will be tested. In addition, students can acquaint themselves with the descriptions of the study course in the departments.

For evaluation of students' knowledge, skills and competences in each study course in the 10-point system the previously described criteria of study results are used. *(Table 2.5.)*.

Table 2.5.

Interpretation of the 10 point system

Level of acquisition	Grade	Interpretation

Very high level of acquisition	**10** (outstanding)	knowledge, skills and competences exceed the requirements of the study course, indicate the ability to conduct independent research and deep understanding of problems
	9 (excellent)	knowledge, skills and competences fully comply with the requirements of the study course, student has the ability to use the acquired knowledge independently
High level of acquisition	**8** (very good)	requirements of the study course are fulfilled, but in some issues there is not a deep enough understanding to use the knowledge independently in solving more complex problems
	7 (good)	in general, requirements for acquisition of the study course have been met, but sometimes there is an inability to use the acquired knowledge independently
Average level of acquisition	**6** (almost good)	requirements for acquisition of the study course have been fulfilled, however there is an insufficiently deep understanding of the problem and inability to use the acquired knowledge
	5 (satisfactory)	in general, the study course has been acquired, but there is insufficient knowledge of some problems and inability to use the acquired knowledge
	4 (almost satisfactory)	in general, the study course has been acquired, however, insufficient understanding of some basic concepts can be established, there are significant difficulties in the practical use of the acquired knowledge
Low level of acquisition	**3** (bad)	knowledge is superficial and incomplete, the student is not able to use it in specific situations
	2 (very bad)	superficial knowledge only about certain problems, most of the study course has not been mastered
	1 (very, very bad)	there is no understanding of the basic problems of the subject, there is almost no knowledge in the study course

Compliance of assessment methods and procedures with the achievement of goals of the study programmes and needs of students is analyzed and improved. To do this, results achieved by students in several academic years are analyzed and compared. Student surveys are also considered. In questionnaires, students evaluate whether the lecturer explains the planned result, defines the evaluation criteria and explains them. Student feedback is essential to improve learning outcomes and assessment.

Evaluation system used by the LU PSK is based on the Cabinet of Ministers regulations #141 of March 20, 2001 on the State Standard of First Level Professional Higher Education:

- the principle of openness of assessment - in accordance with the aims and tasks of the study course, the amount of requirements that must be met in order to obtain an assessment is determined, the student is informed about the requirements at the beginning of the study course;
- the principle of compulsory assessment - the student must meet the requirements of the study course in order to obtain an assessment in the study course, the assessment of the acquired study courses in the study programme must be positive, the content of the program must be mastered so that the student can take the qualification exam;
- principle of summing up positive achievements - evaluation in study courses and program is evaluated by summing up positive achievements;
- the principle of diversity of examination types is used in the assessment - different types of examination are used in the assessment of the program acquisition, within the study course the lecturer regularly tests the students' knowledge using the examination types indicated in the course description;
- the principle of conformity of assessment - the test provides possibilities to prove knowledge, skills and competencies in tasks and practical activities corresponding to all levels of acquisition, the content to be included in the tests corresponds to the content of the study

course and professional standard requirements.

Basic rules of the final examinations are determined by the *Regulations of the LU PSK on State Final Examination*. The Regulations prescribe the procedure by which the state examination for the acquisition of first level professional higher education programmes with award of a qualification is organized. The state final examination is a qualification exam, which consists of two parts: a qualification paper and a test or integrated examination.

Parts of the state final examination - elaboration, submission and presentation of the qualification paper are regulated by the LU PSK *Procedure and Rules for Elaboration, Submission and Presentation of the Qualification Paper* and *Rules for Drawing Up the Qualification Paper*.

The students of the Medicine, Radiographer, Podology, Biomedical Laboratory Assistant, Esthetic Cosmetology and Medical Massage study programmes take part in the integrated finale state examination. The integrated examination has two parts - the theoretical part and the practical part. The total assessment of the integrated examination consists of 50% of the theoretical part and 50% of the practical part. The overall assessment of the state final examination is reviewed by the State Final Examination Commission, based on the average of both parts of the state final examination. If the assessments of both parts are equal, the assessment of the integrated examination is decisive.

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.

Academic integrity is the principle of mutual behaviour of LU PSK teaching staff, students and general staff, as described in the *LU PSK Code of Conduct* (LU PSK Board 29.08.2019. Nr.4) (see: https://www.psk.lu.lv/studentiem/kvalifikacijas-darbi/etikas-komisija (Only Latvian)).

Academic integrity is one of the core principles of LU PSK. Core principles of academic integrity are objectivity, responsibility, mutual respect and trust, all of which exclude deception and deceit.

Principles of academic integrity, their observance during studies, as well as sanctions in case of non-observance, are introduced to the students of LU PSK at the very beginning of study process. These principles are explained to the students by lecturers as part of their Research course. Preventive work of lecturers with students on issues of academic integrity is of paramount importance.

When submitting qualification papers with their signature, students certify that their work is neither a forgery, nor plagiarism. This is also confirmed by a signature of the supervisor of qualification paper. No student has ever been expelled from the LU PSK due to plagiarism.

Academic staff resolves relevant issues in discussions of collegial institutions. To observe principles of academic integrity in fields of study, scientific research and mutual communication, *Regulations on Academic Integrity at P.Stradins Medical College of the University of Latvia* have been developed (LU PSK Council 14.05.2020, #2), and are available on the college web site, as well as the office.

To improve and enhance the quality of study process, as well as promote a more effective control of student papers, the LU PSK plans to introduce clearly defined procedures for plagiarism, namely, by joining the Unified Computer Plagiarism Control System in cooperation with the University of Latvia.

The benefit LU PSK gains in promoting understanding of timely academic integrity is cooperation with students. An important tool for implementation of this mechanism is the Ethics Commission of LU PSK, which monitors implementation of the Code of Ethics, reviews complaints, as well as provides advice and reviews cases of disregard and non-compliance with the Code of Ethics, arriving at decisions within the framework of their competence.

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.

Quality assurance system of the study field is realized in accordance with the quality policy and internal regulatory enactments of the LU PSK. The quality policy of the college and the consistency of the quality assurance system are described in chapters 1.3 and 1.4 of the report.

Improvement of the study direction and existing study programmes takes place regularly and is planned in accordance with the Development Strategy of the LU PSK, as well as taking into account the rapid development of professions acquired in college. Development was ensured by taking into account expert recommendations received during the previous accreditation of the field. For example: promoting involvement of lecturers and students in scientific research activities; increased mobility of students and lecturers.

Study courses and study programme are evaluated by students every year. Students' opinions are obtained using questionnaires. Questionnaires for graduates are also important. In them graduates can assess the sustainability of study programmes and professions in the labor market much more broadly. By obtaining feedback from employers, it is possible to assess the ability of students and graduates to fully integrate into the work environment and perform work responsibilities. At the end of each study year, the information obtained is evaluated and changes in study courses are made. For example, in the Biomedical Laboratory Assistant study programme, starting academic year 2018/2019, changes were made in the distribution of study courses by semesters, equalizing general education subjects to be acquired by semesters and increasing the study courses in the field, especially in the first semester. Such changes were made because students remarked in questionnaires that it is important to acquire more study courses in the field in the first semester. Study courses are supplemented, taking into account requirements of regulatory enactments established in the country. For example, study programmes incorporate study courses that include civil and environmental protection, which comply with the requirements of the *Environmental Protection Law* and the *Civil Protection and Disaster Management Law*.

Study programmes included questions on customer safety and work quality, based on the Council Recommendations on Patient Safety implemented in the European Union countries. Based on the Regulations of the European Parliament and of the Council on protection of individuals as regards processing of personal data and free movement of data, issues related to data security and protection were included in the study programmes, and LU PSK developed *Privacy Policy, Information Security Policy, Personal Data Protection Regulations*.

To gain new experiences and methods for implementation of the study process, new cooperation

partners are sought abroad every year and lecturers travel to exchange experience with lecturers of similar study programmes.

Internal quality assurance system is effective, and measures are taken regularly to improve the field of study.

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).

Development and review of LU PSK study programmes takes place in accordance with the regulatory enactments of the Republic of Latvia (*Law on Higher Education Institutions, Law on Vocational Education, Licensing Regulations of the Study Programme*) and the *Regulations of P.Stradins Medical College of the University of Latvia,* which specifies the procedures and activities that must be followed during the process of development and review of study programs. (see: https://www.psk.lu.lv/en/about-college/documents).

Development of a new study program may be proposed by the College Council, the Director of the College, head of the study field, lecturers of the college, representatives of professional fields, professional associations or other cooperation partners.

A new study programme is developed within a department. An organized working group includes representatives of the academic staff, employers, and representatives of the professional association. In addition, students and graduates may be invited.

Development of a programme begins with development of a concept that contains basic information: defined programme goals, objectives and results, title of the professional qualification, scope of the programme, its duration, type and form of implementation, requirements for previous education. After the development of basic information, content and structure of the study programme is created. *Regulations on the State Standard of the First Level Professional Higher Education* determine the basic rules for the content of the study programme. Study content related to the profession is developed on the basis of requirements of the professional standard. Costs of the study programme are calculated, requirements for the academic staff are determined. Evaluation of employment opportunities of graduates in accordance with the obtained degree is performed, as well as a comparison with other similar study programs in Latvia, and an evaluation of possibilities of continuing studies and other opportunities for cooperation with other Latvian colleges and universities.

An independent expertise of the developed study programme is organized by the department, in cooperation with the study programme council, to which the potential study programme is attached. Upon receipt of expert opinion, the study programme along with the expert opinion is submitted for approval to the college council. After the decision of the college council, the programme is submitted for further evaluation to the Academic Department of the University of Latvia. College study programmes are approved by the Senate of the University of Latvia. The newly created study programme is evaluated in various ways - from the point of view of the

lecturer, student, and employer. Graduates' views on the study programme are added to the analysis starting from the first graduation of the programme.

Information is obtained from lecturers at the end of each semester. Lecturers provide an overall assessment of students' prior knowledge, whether it has been adequate for acquisition of the study course, what are the results of the study course and progress of the students.

Students give their opinion about the study process at the end of each study year by filling in a questionnaire. The questionnaire clarifies the students' opinion about study courses, their quality, cooperation of lecturers with students, as well as evaluation criteria of the study courses, and the provision of the material and technical base.

Employers assess students' theoretical, practical knowledge and general skills in performing work tasks, motivation to work in the profession and the ability to make decisions independently, as well as students' ability to cooperate and work in a team, communicate with patients, clients and other persons. Employers provide this information when evaluating a student afther an internship (study practice). The student's internship diaries are supplemented with the assessment of the internship supervisor (future employer) about the student.

The opinion of graduates is important in evaluating the study programme and study courses in general, how job opportunities in the profession and sustainability of the profession are assessed, as well as what the possibilities for continued studies are.

The head of the programme summarizes the information obtained and provides an assessment of the study year to the study programme council. Thus, if necessary, changes can be made in the study programme. The changes are based on current events in the industry, requirements of employers, changes in the professional standard, changes in the standard of education, as well as the opinion of students and graduates, which is obtained in the annual survey. Students, employers, and academic staff are informed about the results of the surveys and the planned measures to improve the study process.

Changes in the study programme are considered by the Study Programme Council. Internal normative regulations, which determine the procedure and activities to be observed during study programme development and review process, are the *Regulations of P.Stradins Medical College of the University of Latvia*, Procedures on *Student Surveys for Evaluation of the Study Process*, *Procedure for Course Development and Updating of P.Stradins Medical College of the University of Latvia*.

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.

According to the LU PSK quality management policy, students at all stages of studies have the right to submit complaints and proposals. The right of LU PSK applicants to submit complaints about violations in the admission procedure is provided by the *LU PSK Admission Regulations* (*LU PSK Council, 17.10.2019., No.5*) (see: https://www.psk.lu.lv/studiju-iespejas/uznemsanas-noteikumi (Only

Latvian)).

LU PSK applicants have the opportunity to submit complaints and proposals electronically on the college's website. (see: https://www.psk.lu.lv/studiju-iespejas/uznemsanas-noteikumi/reflektantu-priekslikumi-un-sudzibas). (Only Latvian).

Based on the procedure for *Submission and Review of Students' Proposals and Complaints* (*LU PSK Council 14.05.2020, No.2*), LU PSK students have the right to submit proposals and complaints about the implementation of the study process.

The abovementioned procedure determines the form in which students can submit proposals and complaints, the deadline for submitting complaints about identifiable violations, as well as the deadline for providing answers to complaints and proposals. Complaints about violations during examination processes can be submitted to respective departments, their review time is 7 days, while other types of complaints can be submitted electronically, at the chancellery or in a freely accessible place (in the LU PSK 1st building, locker section for applications and complaints). Deadline for providing answers is 10 working days, but not longer than one month from the receipt of the submission, unless otherwise stated by regulatory enactments. Observing the principle of parity and equality in the study process, the same rights apply for the participants of the ERASMUS + exchange programme. The LU PSK students' opportunity to participate in mobility - application, evaluation procedures, funding, as well as the opportunity for students to submit proposals and complaints about the implementation and improvement of the ERASMUS + program mobility process is specified in the *LU PSK Procedure for Students Applying for ERASMUS + Mobility Funding for Study / Practice Abroad*, (*LU PSC Council 21.01.2020., No.1*).

The right of LU PSK students to submit complaints and submissions regarding the implementation of the study process, study and agenda regulations, as well as the right to receive an answer is specified in the *LU PSK Internal Regulations for Students* (*LU PSK Council 01.09.2015, No.4*) (see: https://www.psk.lu.lv/studentiem/dokumenti (Only Latvian)). The student is acquainted with the abovementioned regulations at the moment of signing the Study Agreement, which, among other things, states the students' right to submit complaints, proposals and suggestions.

To ensure objective assessment of students and promote systematic work during the semester and studies at the LU PSK throughout, the *Procedure for Examination of Study Courses* has been approved, (LU PSK Council 01.09.2015, No.4) (see: https://www.psk.lu.studentiem/documenti (Only Latvian)). The abovementioned procedure determines the types, forms and course of examinations, as well as the rights and obligations of students and lecturers in the process of assessment of study course results, and also students' right to challenge the lecturer's assessment within one week after announcing the examination results by submitting an appeal at the department.

During assessment of study processes, students also have the right to submit a protest to the department in the event of a conflict during examination processes, which is reviewed within a week. This is foreseen by the *LU PSK Academic Debt Settlement Procedure* (*LU PSK Council 01.09.2015, No.4*) (see: https://www.psk.lu.lv/studentiem/dokumenti (Only Latvian)).

Regarding the final examinations, the *Regulations of the State Final Examination of the LU PSK* (*LU PSK Council 28.08.2018, No. 4*) have been adopted, which determine the right of students to submit an appeal about the course of the state final examination. To observe the rights and interests of students, observing the procedure of regulatory enactments, the application is examined by the appeal commission, inviting the appellant and the chairman of the state final examination commission to a meeting of the commission. (see: https://www.psk.lu.lv/studentiem/dokumenti (Only Latvian)).

Whereas all disputes related to matriculation of students at the LU PSK in later stages of studies are reviewed at the meetings of the study programme council, as determined by the *Procedure for Starting Studies at the LU PSK in Later Stages*. *(LU PSK Council, 08.03.2016., Nr.3)* (see: https://www.psk.lu.lv/studentiem/dokumenti(Only Latvian)).

LU PSK students have access to the *Code of Ethics* (*LU PSK Council No. 4 of 29.08.2019*), which specifies ethical norms for college students in mutual communication, professional activity, as well as their rights in dealing with other institutions and society (see: https://www.psk.lu.lv/studentiem/kvalifikacijasdarbi/etikaskomisija(Only Latvian)). There is also an Academic Arbitration Court, the regulations of which provide the students with a possibility to address disputes regarding academic freedom, restrictions of rights, violations, etc. issues related to studies.

Pursuant to the procedure specified in regulatory enactments regarding the amount of scholarships and the procedure for awarding scholarships, LU PSK students have access to the *Scholarship Award Regulations* (*LU PSK Council 21.01.2019, No.1*), which includes students' right to challenge the decision of scholarship award commission within 10 days of its receipt.

In protecting rights of students outside the study process, students residing in service hotels have access to the *LU PSK Internal Regulations of Service Hotels*, which determine the rights and obligations of those living in a service hotel, including rules for submission of proposals and complaints.

In accordance with the applicable legal acts, observing the right of a person to the lawfulness of personal data processing, information on personal data is provided on the website of the LU PSK (see: https://www.psk.lu.lv/par-koledzu/privatuma-politika-psk (Only Latvian)) as to the purpose, scope, protection, processing time and right to lodge a complaint with the supervisory authority - *Privacy policy*,*(LU PSK Council 18.12.2018., Nr. 8).*

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.

LU PSK regularly collects information on:

- results of admission of applicants – once a year;
- students' progress – once a semester;
- reasons for dropping out – once a year;
- student and teacher mobility indicators - once a year;
- performance indicators for lifelong learning services - once a year;
- assessment of teaching staff work quality by the students - once a year;
- assessment of the quality of study process by students - once a year;
- graduate satisfaction with the achieved study results - twice a year;
- employment of graduates - once a year;
- quantitative and qualitative results of students' scientific and creative activities - once a year;
- quantitative and qualitative results of the scientific and creative activities of the teaching staff - once a year.

Information data systems - LAIS (student information system) and HORIZON (personnel management program) are available for the accumulation and further analysis of the statistical database in the college.

The abovementioned information is analyzed by performing analysis of achievement of strategic goals and the implementation of action plans, as well as the annual self-assessment. Based on the results of quality assessment of the study process, the college improves or includes additional activities related to the study process organization, material and technical provision, informative provision in the development plan. For example, analyzing the results of surveys of employers and students, by attracting ERAF project funds the college was equipped with an intensive care simulation class.

Based on the results of the evaluation of the teaching staff, the head of the field and heads of study programmes perform an analysis of the quality of teaching staff. The identified shortcomings help determine development directions of the teaching staff. The analysis of the quantitative and qualitative results of scientific and creative activity allows to evaluate involvement of students and lecturers of the field and its study programmes in scientific and creative activity. If necessary, additional activities are developed to promote scientific and creative activities in the study field.

Owing to effective and constructive communication of the college management with the students, activities promoting college recognition and students' professional activity were initiated in the reporting period. Within the framework of clinical practice, the college organized student services, such as foot care and facial procedures, for the residents of Jūrmala, thus promoting the improvement of students' knowledge and skills, developing excellent communication with clients, strengthening the necessary skills for proper preparation and maintenance of work environment. , gaining experience in creating a recording system.

For career development of students, based on suggestions of employers, “Career Days” were organized at the college, thus ensuring engagement of specialists to the labor market.

Evaluation of quantitative and qualitative results of the scientific and creative activity of the teaching staff is realized on the basis of the self-assessment provided by lecturers and discussions with college administration and management of the study programme. The evaluation provides an opportunity to plan improvement activities and pedagogical workload of the academic staff.

At the end of each study year, the head of the study field in cooperation with study programme managers uses the accumulated data in performing self-assessment of the study field and programme. As a result of the analysis, SWOT analysis is performed, decisions are made on the improvement of the content of the study program, study process, procedures, etc. The self-assessment reports are reviewed and approved at the meeting of the College Council, submitted for approval to the University of Latvia and afterwards published on the college website.

Once a year, students evaluate the quality of the study process, as well as other issues that have been important to students during the year. The head of the study program and course curator introduces the students with the obtained results. Such feedback provides additional discussion and can gain additional students' views on issues relevant to them.

Graduates give their opinion on the study process, its quality, prestige of the study program and other issues at the end of the study process. The head of the study program sends the results of the survey to the graduates, if necessary, inviting the graduates to additional discussions in connection with the obtained data.

Feedback with employers is formed in different directions, both on the part of the employer and the practice manager. Analyzing the assessment of the internship supervisors about the students who

have been in the internship, the problem directions and examples of good practice in relation to the student's professional activity and attitude during the internship are clarified in the form of discussions. Also, every year discussions are held with employers, practice supervisors and teaching staff of the study program, where all involved parties are informed about the results of the surveys and in the form of discussions information is obtained to improve the study process.

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).

LU PSK official web site (henceforth – site): https://www.psk.lu.lv/(Only Latvian). A general description of the site and an overview of the sections of the site is given in tables 2.6. and 2.7.

Table 2.6.

General characterization of the web site

Descriptive parameters	Characterization
Goal	To provide publicly available information about the main activities and current events of the college in the digital environment
Target audience	Students, academic and general staff of the college, prospective students, cooperation partners, health and social care specialists, society at large
Content managers	Public relations specialist of the LU PSK is responsible for placement of content on the website and for its continuous supervision. He/she cooperates with the structural units of the college and external service providers in maintenance of the website.
Languages	Content of the website is available to users in two languages - Latvian and English. Sitemap and content vary. The content in Latvian is designed to provide information to prospective students and current students, college staff, collaboration partners in Latvia, those interested in further education, and the general public, while the content in English is designed to provide information to foreign collaboration partners and mobility participants.
Responsive design	Responsive design provides access to content on both stationary and smart devices (mobile phones, tablets, etc.), which in turn allows site visitors to view content, ensuring that the site adapts to the device used.
Performance monitoring	Maintenance includes periodical quality checks, during which the site's speed, user-friendliness and handiness of the search engine (SEO) are determined, visual defects are eliminated, text quality control is performed and other characteristics are analyzed.
Map of the site	Development takes into account the basic needs of target groups obtaining information about LU PSK and Rēzekne branch. The structure is designed so that the user of the site can easily and clearly access the information needed.
Sections	Content is structured in eight sections

Table 2.7.

Overview of LU PSK web site sections

Section	Subsections	Characterization of the content of the section

The College	General information about the college; Rezekne branch; Structure; Quality policy; Privacy policy; Reports; Accreditation; Projects; Procurement; Photo gallery; Video; College logo; Accessibility of environment; Vacancies; Real estate intended for rent.	General information about the college, Rēzekne branch, history, main activity and development, use of visual identity element (logo). College structure. Information confirming compliance with the General Data Protection Regulation by the College. The section provides publicly available documents and reports (reports, procurement procedures, ERAF project publications, etc.). Annual self-assessment reports of the college are available on the internal server of the college. **Responsible for the content of the section:** unit whose competence and responsibility include issues of the specific subsection.
Study opportunities	Study programmes; Admission rules; Open days; Get to know the profession.	A section on the website where the prospective student or interested person can get clearly structured information about study fields and study programmes, admission rules, career events organized by the college - Open Days, additional information about the possibility to apply for a college visit to provide career guidance to students. **Responsible for the content of the section:** head of the admission commission, public relations specialist.
For students	Calendar of the academic year; Lecturers / Consultations; Documents; Qualification works; Scholarships; Loans; ISIC student card; Library; Service hotel; Price lists; Proposals / Suggestions; course emails; Student self-government.	A section for the support of college students and convenient access to information needed in the study process. Information about the calendar of the specific academic year, lecturers, access to current basic documents and forms for students, information about the process of developing a qualification paper, about the services available to students in the college. Possibility to ask questions on the site when filling out a form. Employee of the college unit who has received the completed form is responsible for providing the answer. **Responsible for the content of the section:** unit whose competence and responsibility include issues of the specific subsection.
International collaborations	Current events; ERASMUS + program; Who can apply for the ERASMUS + program; NORDPLUS; ERASMUS + eMED-PASS; ERASMUS + AMiDE; ERASMUS K107 project; Cooperation universities; Student experience stories; Contacts.	The section contains information on the College's involvement in the implementation of ERASMUS + programme, on the procedure by which a student or academic or general staff may apply for ERASMUS + programs for mobility funding. A list of college partner universities and study programmes is available, as well as information on previous and current international projects in which the college participates as a partner. By filling out a form, one can ask a question on the website, which will then be sent to external relations coordinator. **Responsible for the content of the section:** external relations coordinator, deputy director for research, publicity coordinator assigned to the specific project working group.
Research	Current events; Conferences and seminars; Scientific Council; Scientific research projects; Cooperation offers; Contacts.	The section summarizes and publishes information about the research process in the college. Schedule of scientific research conferences organized by the college by academic years (archive and conference programs) is available. Information about the college's internal research project competitions. **Responsible for the content of the section:** Deputy Director for Research.
Continuing education	Current events; Continuing education opportunities; Courses; ESF courses.	Information for specialists working in the field of health and social care about professional development opportunities offered by the LU PSK. **Responsible for the content of the section:** those appointed in the structural unit responsible for the organization of professional development activities.
Current events	All current events; International cooperation; Research; Continuing education; Calendar of events.	All published current events available in the archive by sections, accessible by years. **Responsible for the content of the section:** a structural unit whose competence and responsibility is to prepare the topical issues of the specific section.

Contacts	Contact information; Requisites; Contact form.	Contact information of the LU PSK and Rēzekne branch, location on the map (Google maps), information on structural units and specialists for communication. By filling out a form, one can ask a question and send it to the college registry e-mail. **Responsible for the content of the section:** chancellery, personnel department, public relations specialist.

The "Study Opportunities" section of the LU PSK website provides information on study programmes of the *Healthcare* study field – *Medicine*, *Esthetic cosmetology, Medical massage, Biomedical laboratory assistant, Radiographer, Podology*. In development of content, a unified presentation of information has been observed to provide visitors of the website with clear and understandable information about the specific study programme.

Each study programme has the following information published on the LU PSK website: business card (name of the study programme, qualification to be obtained, study programme code, duration of studies, credit points (KP / ECTS), level of education to be obtained, place of study process, type of study implementation, indication of state budget study places or paid studies, information on previous education, information on the head of the study programme; description of the specialty; the main professional tasks of the particular social care and social rehabilitation specialist; current professional standard; the aim of the study programme; place of practical realization of the study programme; study courses to be acquired; cooperation partners in the implementation of the study programme; opportunities for graduates in the labor market; further study opportunities; ERASMUS + mobility opportunities during studies in college.

The head of the department is the one responsible for preparation, updating and submission of the abovementioned information to the LU PSK public relations specialist for publication on the website. Mutual collaboration promotes provision of true information about both the field of study and the specific study programmes to the visitors of the public space.

Information on study programmes of the *Healthcare* study field has been published and is also available in the English version of the website, considering the structure and content in Latvian.

Information on the *Social Welfare* study field and its study programmes on the LU PSK website is in accordance with and corresponds to the information available on the websites of official state registers: https://www.aika.lv/en/ (Higher Education Quality Agency), www.viis.gov.lv (Only Latvian) (State Education Information System of the Education and Science Ministry of the Republic of Latvia), www.niid.lv (Only Latvian) (National Education Opportunities Database of the State Education Development Agency). Persons responsible for updating the college information - head of the chancellery, public relations specialist.

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 financial resources of the College consist of three sources: funding of the Ministry of Education and Science of the Republic of Latvia for the implementation of study programs (state grant for 616

students), income from paid services and other income of the College (paid study programs, rent, etc.), European Union organizations and other international organizations financed projects *(Image.2.2.;2.3.).* In 2020, expenditures exceeded revenues due to the large-scale construction of the college, in Jūrmala Vidus prospektā 38, the construction of the 1st building extension, which was financed from the college budget and an ESF-funded energy efficiency project for both the college and the service hotel. buildings, in cooperation with the University of Latvia. The main position for fee income is tuition fees ~ 80%.

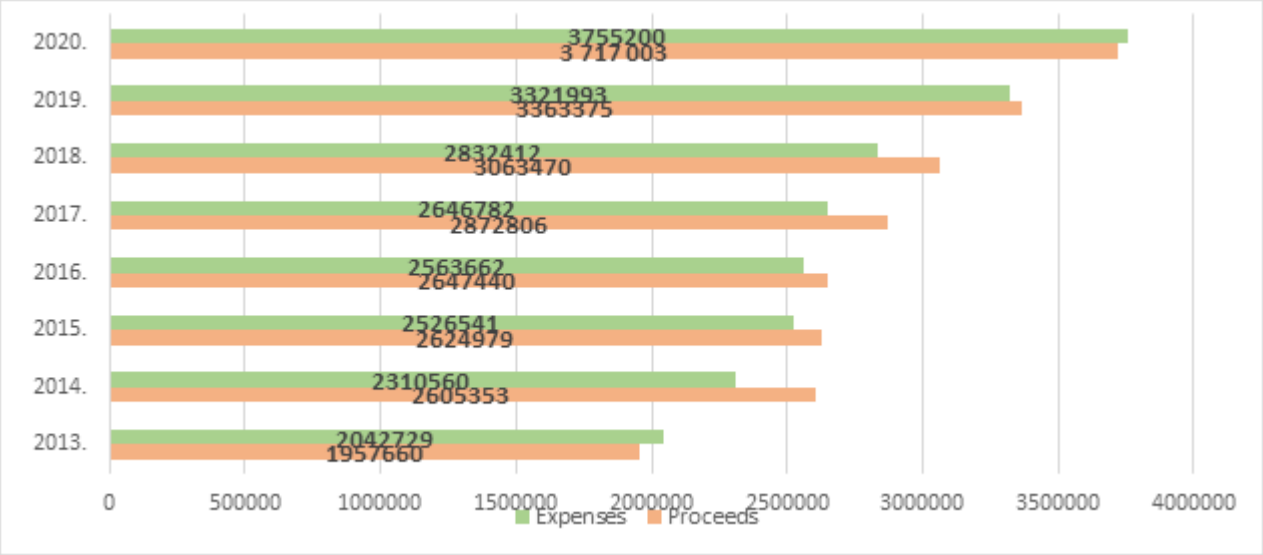
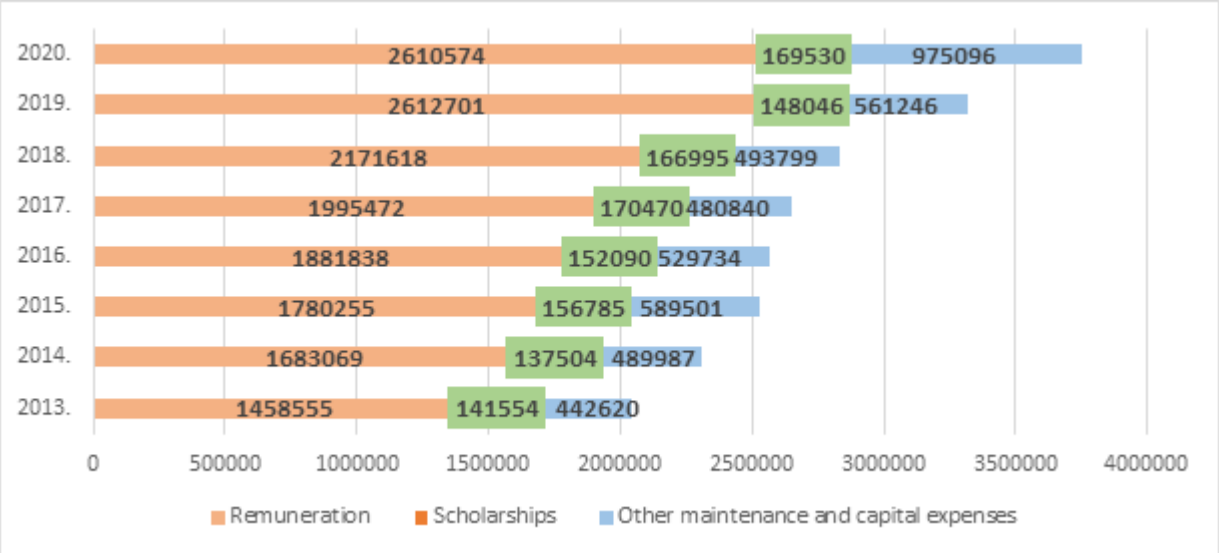


Image.2.2. **Comparison of LU PSK revenues and expenses in the reporting period**



Pic.2.3.. **Comparison of LU PSK expenses in the reporting period**

On average, 70% of the state budget grant is spent on salaries (including taxes). The remaining 30% of funding is allocated for maintenance of college infrastructure, development, purchase of equipment to ensure the study process, scientific research (Spirometer with computer, professional scales, pulse oximeters and tonometers), popularization of the college, etc. activities *(Image.2.4.).*

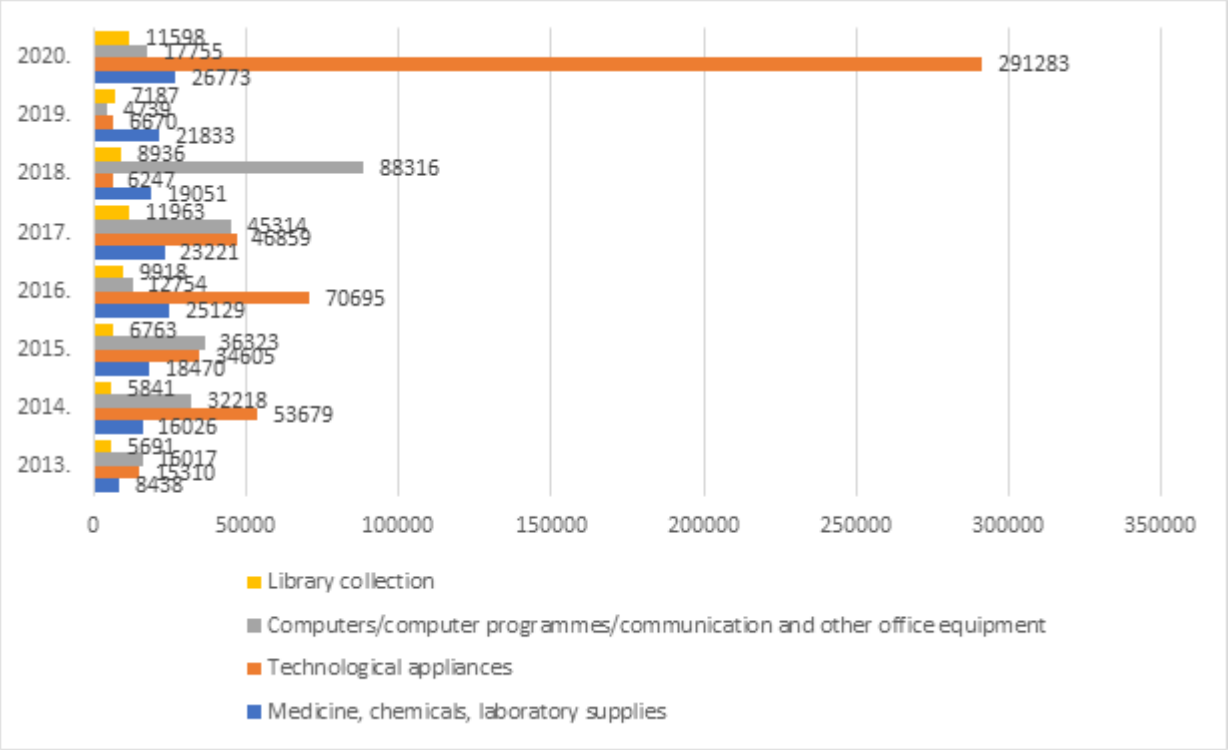


Image.2.4. **LU PSK financial distribution for improvement of material and technical base**

Financing of the programmes to be implemented is a budget grant (Medicine, Biomedical laboratory assistant, Radiographer, Podology) and self-financed (Esthetic cosmetology, Medical massage, Podology) (Table 2.8.).

Table 2.8.

Financing of study programmes for the *Healthc are* study field

Study programme	**Cost of a study place** (Euro)		**Tuition fee per annum** (Euro)
	Basic cost of a study place Budget financing	Cost of a study place Self-financing	
Medicine	1630,11	-	-
Biomedical laboratory assistant	1630,11	-	-
Radiographer	1630,11	-	-
Podology	1630,11	2000,-	2000,-
Esthetic cosmetology	-	2000,-	2000,-
Medical massage	-	1200,-	1200,-

Costs of the study programme include salaries, mandatory state social insurance contributions of the employer, business trips and business trip expenses, service costs, materials, energy resources, inventory expenses, purchase of books and magazines, purchase and modernization costs of equipment. The costs of the study program per student do not depend on the place of implementation of the study program. This means that the costs are the same in both Jurmala and the branch. (Table *2.9.).*

Table 2.9.

Calculation of study programme costs

Indicator	Medicine	Biomedical laboratory assistant	Radiographer	Podology	Esthetic cosmetology	Medical massahge
Cost of a study place	**2532.37**	**2668.82**	**2462.66**	**2072,4**	**2232.34**	**1392.97**
Salary per study place	1334.05	1431.38	1366.94	1430,8	1464.19	1034.5
Compulsory state social insurance contributions by employer per study place per annum	314.7	337.66	322.46	337,52	345.4	244.08
Cost of business trips and expenses per study place per annum	58.18	87.62	27.04	23,04	23.3	8.9
Cost of services per study place per annum	548.14	525.54	350.04	165,77	219.56	56
Cost of materials, energy resources, water and inventory per study place per annum	219.56	203.69	219.56	87,57	88.13	33.89
Cost of book and magazine purchase per student per annum	7.99	7.99	7.99	7,99	7.99	7.99
Equipment purchase and modernization costs per study place per annum	49.75	74.94	168.63	19,7	83.77	7.61

Tuition fees in budget-funded programmes are determined in relation to the basic funding, by assigning a coefficient. In healthcare study programmes, the coefficient can be up to 3.0. Tuition fees in self-financed study programmes are influenced by the implementation of study programmes in other higher education institutions, for example, Esthetic cosmetology, Therapeutic massage, it influences the pricing policy in conditions of competition.

Financial resources are not separated between implementation places and structural units, finances are integrated depending on the resources required for the study process. However, in addition to the operation of the branch, additional financial resources include the rental of premises and expenses related to the use of the premises, as well as support measures for teaching staff, such as payment for business trips.

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.

The college provides the study base necessary for implementation of the study direction. The College has the necessary material and technical support in the inventory and in the inventory of fixed assets in order to be able to implement the study programs in the field of study. Its main components are study buildings with modernized auditoriums, specialized study rooms with modern equipment, a library that meets the requirements of higher education institutions, professional academic and general staff.

Realization of the *Healthcare* field study process takes place in:

- the college premises, Jūrmala, Vidus prospekts 38,
- the Rēzekne branch of the college, Rēzekne, N.Rancāna street 23a.

Study process in Jūrmala is mostly accommodated in three study buildings with 10 well-equipped classrooms with computer technology and provision of specialized teaching aids according to the purpose of the classroom, 4 laboratories (microbiology, chemical and environmental medicine, hematology, biochemistry), 8 pre-clinical offices (care rooms, emergency room, child care room, podiatry room, manicure and pedicure room, massage room,) and four classes – cosmetology training class, diagnostic examination radiological image simulation class, radiographic examination simulation class, mammography examination simulation class.

Rēzekne branch of the college realizes the study process in one building, in which 4 well-equipped auditoriums with computer technology and the provision of specialized teaching aids related to the study process are concentrated in accordance with the purpose of using the auditorium. There is a well-equipped health care room, an emergency room, a massage room and a computer class.

The college dynamically develops evolvement and implementation of new teaching methods and purchases, installs and trains academic staff to train students in using the appropriate technological equipment implemented in the field, for example, simulation programmes of emergency medical care.

The LU PSK has agreements on provision of clinical training for students in the *Healthcare* study field with largest clinics and laboratories, This ensures continuity of study process, development of practical knowledge, skills and critical thinking.

LU PSK college has a well-equipped service hotel, which provides 110 places for students. The service hotel has a lounge, Wi-Fi access and common areas equipped with appliances. Operation of the service hotel is determined by the regulatory enactments of the University of Latvia: *Regulations of the Service Hotel, Internal Regulations of the Service Hotel*. For use of the service hotel, the student enters into a lease agreement based on the college price list.

The College has developed a procurement policy, which is determined by the *Regulations of the Procurement Commission, the Procedure for Organizing Procurement*. The purpose of the Procurement Commission is to ensure rational and efficient use of funds intended for college procurement, openness of the college procurement procedure and free competition of suppliers. Planning for improvement of the necessary material and technical base is organized at the beginning of each year, accepting applications from teaching staff, heads of departments, heads of structural units and reviewing them at the meeting of the procurement commission. Given procedure provides financial flow planning for the current year.

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.

LU PSK students and lecturers have access to a well-maintained library. The college library is accredited in accordance with the procedures prescribed by law, it has been granted the status of a library of local significance, Accreditation Certificate No. 825 issued by the Ministry of Culture, of 03.06.2019.

The aim of the library is to create a library as a specialized repository of medical knowledge and to further develop the library infrastructure, using the latest technology, as well as to cooperate with college heads and lecturers, providing the study process with the latest medical, social sciences and research literature.

Study and research resources intended for implementation of the study field are offered both in the college library and in cooperation with Riga Stradins University, the University of Latvia Library and Jūrmala Central Library. The College offers information resources for acquisition of both general education study courses and branch and specialization study courses, offering a total of 10,032 information resources - books, as well as branch journals.

70% of the library collection is medical literature. Available literature in psychology, pedagogy, social care, cultural history and philosophy is widely represented. The collection also includes reference books, dictionaries and various encyclopedias.

Library collection, equipment and premises are property of the college. The material and technical basis of the library consists of library premises, equipment, security system and other property structured, developed and provided by the college. Assessment of the material and technical condition of the Library - building, premises, equipment, comply with *Tasks of the Library* and the Cabinet of Ministers Regulations No. 395 of January 1, 2002 on *Library material and technical basic standards*. The library has 16 reader workstations, 7 desktop computers for users, a printer / copier / scanner, a device for binding documents with a spiral. The library has wireless internet accessible with portable devices.

Library users are offered universal library and bibliographic services for local and remote users: providing users with information resources, ordering information resources from other libraries, electronic delivery of documents to users, online electronic catalogues and digital databases, consultations and user training, bibliographic references. Paid services include document printing, copying and scanning, spiral binding of documents, access to online resources via open access computer workstations and wireless internet users' portable devices.

Seminars are organized for students, lecturers and general staff at the beginning of each study year, introducing users to library services, online catalogs and databases, location of the library collection, as well as current events in the college library.

Collection of information resources available in the college library is supplemented in accordance with the developed concept of the *Collection of the Library of LU PSK* and *Regulations of the Library*. Replenishment of the library collection takes place on the basis of proposals expressed by lecturers, as well as students for the provision of study process. Requests to supplement the collection are evaluated by the Library Commission, whose duties and rights are specified in *Library Regulations*. The commission consists of heads of the study fields, deputy director in study work and the head of the library. The college library invites lecturers to plan the study literature necessary for studies in a timely manner, as well as informs about the latest books published in the field both in Latvia and abroad.

Completion of library collection takes place in the library information system School Alice, *Completion* module. Shipments are processed and new copies of information resources are added.

The library's electronic catalogue is accessed by passwords given to library employees only. These are not disclosed. It ensures security of the electronic catalogue data.

Bibliographic resources are combined, regardless of the place of implementation of the study program. If a bibliographic resource is not available in the branch, which is available in the college library in Jūrmala, then it can be delivered to the students in the branch, ensuring the availability of the necessary resources.

The library subscribes to press publications published both in Latvia and abroad. Professional reading magazines are available in the reading room – “Doctus”, “Latvijas ārsts”, “Ārsts.lv”,“Annas psiholoģija”, “Podologie”, ”Podologie praxis”,”Radiography”, “Diseaster medicine and Public health preparedness”, “Le Nouvelles Estetique Latvija”, “Kosmetika i medicina” ,””Medicus bonus”, “Social work”, “Sociālais darbs Latvijā “/ Labklājības ministrijas izdevums/ u.c..

Operation of the library is fully financed from the college, observing the norms of financing necessary for the operation of libraries specified by the Library Law and regulations of the Cabinet of Ministers as regards necessary financing for library operation.

Table 2.10.

Funds used to supplement the library collection for realization of the study field

Year	Funds used (euro)	Number of books purchased
2013	4 500,-	316
2014	9 200,-	303
2015	9 000,-	819
2016	12 000,-	503
2017	15 000,-	639
2018	12 000,-	414
2019	8 400,-	460
2020	12000,-	365

The library provides students with consultations on the use of electronic catalogs and electronic databases, training to improve information retrieval skills, offers thematic and bibliographic references. The library also compiles a list of information resources on a specific topic. Study and research resources in the library are provided for all study directions implemented in the college. Library users can also use the library's informative e-mail to communicate with the library, via which users are provided with references and information services. All information about the library's opening hours and available services is posted on the college website, library section. Students can acquaint themselves with the new acquisitions to the library on the special “new book” stand. Information about library news and reminders about use of electronic database EBSCO is regularly sent to group e-mails.

Resources of the library collection are supplemented in cooperation with the Culture and Information Systems Agency of Latvia, book supply of the University of Latvia, the library of Riga Stradiņš University, Medical supply of Latvia, internet bookstores - krisostomus.lv, ”Kniga.lv” etc., as well as book publishers in Latvia.

In the reading room one can acquaint oneself with the methodological materials of the study course developed by the lecturers: pharmacology, Latin, classical massage, podology, microbiology and hygiene, ergonomics.

In the library students have access to the electronic database of Qualification Papers developed in previous years, it is also possible to view abovementioned papers graded 9 and 10 points in paper format. College students can receive literature for work at home and in the reading room.

Since January 2018, medical college has subscribed to the EBSCO National Package database. It is a universal full-text database of thousands of full-text journals, newspapers, reference books and other sources on a wide range of topics. Statistics compiled by the Cultural Information Systems Center show that students actively use database information to master the study process. Comparing 2018 and 2020, attendance has significantly increased (*table 2.11*). Students confirm that availability of the database is very important in the process of developing qualification papers, because it contains results of the latest scientific articles and research.

Table 2.11.

Overview of the EBSCO data base use

Requests	2018	2019	2020
Database sessions	8084	11 289	18 129
Total number of searches	33 475	55 602	87 026
Requests for full texts	1286	2115	3071

The total area of the library is 104.9 m2. In 2017, new furniture was purchased - tables in the reading room, chairs, a shelf for display of the latest books. Material and technical base of the library has improved compared to previous years. Since 2019, the library has 2 printers and 2 multifunctional devices, two handheld barcode scanners and a document binding machine with plastic spirals available. In 2020, a color copier was also purchased.

Working hours of the library are set in accordance to student interests, The library is open 44 hours a week, every week day 8:30 – 17:00 (Tuesdays 8:30 – 18:30).

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.

Information technologies are used in acquisition of all study field programmes. All classrooms are equipped with multimedia projectors, which are connected to computers for visualization of study material, and internet connection (wireless) is available in all rooms of the building. In turn, the academic staff is provided with workplaces, computers for planning, organizing and controlling the study process, internet connection and equipment for printing the materials necessary for the organization of the study process.

Starting 2018, Latvian Higher Education Institutions Information System (LAIS) has been used for organization and management of study processes. It includes a part of the University of Latvia Information System (LUIS) functionality, which is adapted to the needs of the college. The LAIS system is used on a daily basis by the staff of the chancellery, who manage the document flow

related to management of study process organization, and department clerks, who manage the document flow related to student data entry and learning process document circulation activities. The supervision of the rights of LAIS system users is performed by a person appointed by the college - the senior computer network maintenance administrator. Supervision of financial processes of the paid study programs is performed by the college accountant.

From 2018, personal data protection supervision is provided by a personal data protection specialist, who in cooperation with college staff, academic staff and students' self-government evaluates the results of personal data protection audits performed at least once a year to identify deficiencies, eliminate their causes, perfect and improve protection of personal data.

In the period until 2015, 119 hardware units were purchased to ensure the college study process in Jūrmala and Rēzekne branch with system software Microsoft Windows 7, MS Office 2010 programmes from 2013 to 2016 were upgraded to MS Windows 10 Pro version to create remote hardware monitoring , management and security system against data loss. Every year, the college replaces at least 10 hardware units and updates software to improve productivity and use the latest high-functionality software in the training process.

In the period from 2013 to the beginning of 2021, additional study classrooms, practical training rooms have been created, which are provided with new computer equipment and multimedia projectors or large-format displays. In total, as of the beginning of 2021, the college uses 174 computer units, 44 printers, 32 multimedia projectors, most of which are near-projection multimedia projectors with a built-in sound system as well as 9 large-format displays. In 2020, measures to increase the energy efficiency of two buildings and the construction of a new training building were launched within the framework of EU funds and college funding. By June 2021, after commissioning of the new training building, three additional auditoriums, two practical training rooms and classrooms for lecturers will be created. These will be provided with computer equipment with an Internet connection. The average age of computer equipment used in college is 6,2 years.

From the spring of 2020, with implementation of opportunities provided by the Microsoft Office365 platform in college, an interactive environment is available for academic staff and students, in which to organize additional learning processes using the interactive Microsoft TEAMS platform. The academic staff has an additional opportunity to organize distance learning process in five classrooms using network cameras and computers with an internet connection.

Information technology room has 18 workplaces for students and 1 workstation for a lecturer equipped with a multimedia projector. Workplaces for students are arranged so that the lecturer can follow the activities of each student at the same time. The minimum distance between the workbench with the monitor (from the back of the monitor) and the next workbench with the monitor is not less than 1 m, but between the side surfaces of the monitors - not less than 0,5 m. The room is equipped with air conditioning, ensuring average room temperature of 20°C. Computer class windows are equipped with blinds to prevent direct sunlight from entering the room, if necessary. Room lighting is provided by 12-day light lamps. All computers are connected to a global computer network, so internet is available on any computer. The interconnected computers are connected in a local network, which provides access to information of any computer.

For personnel resource management and automation of accounting processes, LU PSK has implemented the ERP HORIZON system to ensure unified accounting and management of financial, material and human resources. Achieving the set goal in development of new study programmes, the number of training programmes provided increased, the number of students increased and the circulation of materials necessary for the study process increased, thus there was a need to improve the management of these resources and automation of accounting processes. To ensure

the above-mentioned goals, from 2018 a personnel resource management module is used, which is intended for simultaneous work of two specialists, and provides three jobs for accounting specialists. In addition to secure data storage, a server was purchased and installed, to improve data processing performance and creation of backup copies.

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.

The process of attracting and employing the teaching staff of the LU PSK (including announcing vacancies, hiring, election procedure, etc.) is regulated by internal regulatory enactments: *Regulations on Academic and Administrative Positions*, *Procedures for Hiring and Firing Employees*, *Accounting and Planning Procedures for Workload of the Academic Staff*. Regulatory documents is available on the college server as well as in the secretariat. LU PSK employs elected and invited lecturers. A competition for elected lecturers is announced in the magazine "Latvijas Vēstnesis", on the websites of the University of Latvia and the college. Election of teaching staff to academic positions is based on the requirements of regulatory enactments and *Regulations on Academic and Administrative Positions*. Regulations are available on the college server (1. annex).

Applicants for academic staff are evaluated in an open competition based on common criteria. The applicant is evaluated according to the following criteria: education, professional work experience, pedagogical experience, scientific and creative activity, communication skills. Every lecturer is entitled to apply for the announced position if he or she meets the set criteria. Academic staff is elected by the College Council for a term of six years. Additional criteria for selection of invited teachers is recommendations from health and social care institutions.

Further procedure is determined within the framework of these regulations - registration of employment relations with the elected candidates. Instructions as to the organization of study process, work safety and fire safety, as well as other work-related introduction activities. Appointment of the academic staff is the responsibility of the head of the department in cooperation with personnel department.

In personnel policy, it is important to ensure a supportive work environment, which in turn allows academic staff to perform their duties in a high-quality and efficient manner. In accordance with the *Standards and Guidelines for Quality Assurance in the European Higher Education Area*, the college has established fair and open procedures related to staff recruitment and performance, and provision of a quality study process.

Quality assessment of the academic staff is based on the results of student survey, the quality of study courses, scientific and creative activities of the individual, participation in projects, adherence to disciplinary schedules, communication skills with students and administration, as well as the number of possible complaints. The head of the department evaluates the workload of each lecturer. Teaching staff is informed about the results of the evaluation of the quality of their work in discussions with administration and the head of the corresponding study programme at the end of the study year.

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.

Qualification of the academic staff is monitored on the basis of the Regulations of the LU PSK on Academic and Administrative Positions, where the main directions are selection of staff and professional development.

Regulations for the formation of following academic staff structure have been developed and implemented:

- the academic staff consists of highly qualified teaching staff who have obtained a doctoral, master's or bachelor's degree;
- specialists are involved in the study process who ensure the specifics of the corresponding study programme;
- academic staff with well-developed pedagogical skills, methodically prepared and able to apply modern teaching methods and technologies are involved in the implementation of study courses;
- study process is realized in a creative atmosphere, which promotes professional growth of the teaching staff, develops the strengths of the academic staff, promotes scientific research development / results.

The policy of academic staff motivates and encourages teaching staff to improve their qualification by studying for a master's or doctoral degree, to deepen their knowledge in various in-service and further education programs offered. Currently, the lecturers continuing their doctoral studies in educational sciences are I. Briža and A. Koha. LU PSK provides financial support to doctoral students for covering expenses of inclusion of scientific works / publications in internationally recognized and cited databases, as well as for covering participation fees in international scientific conferences in Latvia and abroad. One of the quality indicators in the reporting period is the growing number of college lecturers with a doctoral degree (5 doctors). Participation in scientific and international conferences improves foreign language knowledge, broadens horizons, creates an opportunity to gain new experience, meet new colleagues, which in general promotes quality of study process implementation.

Policy directions of the academic staff are the evaluation of annual achievements of teaching staff, where scientific research, pedagogical and organizational results are evaluated.

To ensure a modern study environment, the college organizes seminars and further education courses to develop the use of innovative teaching methods among the teaching staff. The College organizes seminars for both academic staff and lecturers, for example, on the development of qualification papers, use of Skype, preparation of scientific articles. During the Covid-19 pandemic, training was provided on the use of online platforms such as Zoom, Microsoft Teams.

In general, teachers’ knowledge of a foreign tongue and its use in the teaching process is sufficient, but some academic staff need to further expand their use of foreign languages by taking an active part in both Erasmus + projects and exchange trips.

The college supports involvement of teachers in professional associations, which promotes cooperation with the professional environment.

In accordance with the requirements of the Regulations on Academic and Administrative Positions, elections for positions of academic staff are held, where teaching staff is elected to the position for six years. This is among motivating factors for the academic staff to maintain high work results and raise their professional qualification. It is an opportunity to evaluate quality indicators of the academic staff by evaluating their achievements and highlighting shortcomings that open new perspectives for development. Another motivating factor for academic staff is the creation of such working conditions that confirm the importance of teaching. Motivation of academic staff to participate in in-service training activities promotes the quality of the content and realization of study courses. *Table 2.12.* shows the latest examples of opportunities for the growth and professional development of teachers. Detailed list of faculty growth opportunities in the appendix.

Table 2.12.

Assessment of the growth and qualification improvement of the teaching staff

Number	Types of events	Results to be achieved during the reporting period
Methodological seminars		
1.Methodology of higher education establishments		
1.	Higher education teachers' professional development program “Innovations in higher education didactics”,LLU (2018;2019)	Inguta Grinberga, Dace Stankeviča
2.	Project no. 8.2.2.0/18/A/010 "Renewal of Academic Staff and Improvement of Competences, University of Latvia (2019)	83% (30) of academic personnel (n=36) certificates for attending courses.
2. Digital skills		
3.	WIFI access point software RouterOS installation and configuration courses (2016)	Jānis Oliņš, Aivars Muižnieks
4.	Development of digital skills of academic staff and Use of online tools and distance learning course organized by Master Training (2019; 2020)	78% (28) of academic personnel (n=36) gained certificates for attending courses.
3. Improvement of foreign language skills		
5.	Improving foreign language skills in English (2014; 2018)	Sintija Harju, B2; B1 level
6.	Raising Competences of Foreign Language Skills in English organized by the State Education Content Center (2014)	Ruta Akermane, Ināra Dupure, Iveta Strode
7.	Project no. 8.2.2.0/18/A/010 "Renewal of Academic Staff and Development of Competences, English, University of Latvia (2020)	Ina Vīksniņa – A2 Rūta Melbārde Vāvere - B2 level
4. Scientific seminars		
8.	AIC seminar Professional development of academic staff: challenges and experience (2018)	Dagnija Gulbe, Dace Erkena
9.	Use of data in medical research in Latvia. Scientific activities and publishing skills. (2020)	42% (15) of academic personnel (n=36) gained certificates for attending courses
5. Conferences on National Level		
10.	Biopsychosocial model in medicine (2019)	10th Student Scientific / Practical Conference, guests LU RMK and Riga 1st Medical College 68 attendees.
11.	Research in study process (2021)	40 attendees

12.	Health: multidimensional approach (2021)	11th Student Scientific / Practical Conference, guests LU RMK and Riga 1st Medical College, 70 attendees
6. International Scientific Conferences		
13.	Professional competencies in the age of modern medical technology innovation III (2020)	210 attendees
14.	Section of the 79th International Scientific Conference of the University of Latvia – Interdisciplinary Research in medical colleges (2021)	150 attendees
15.	Health. Comfort. Practice IV(2021)	100 attendees
7. Increasing of professional competence		
	Activity	**Achievable result within reporting period**
16.	Professional competence development programmes	From 2013/2014 till 2016/2017 89% (32) of academic personnel (n=36) gained certificates for attending courses
		From 2013/2014 till 2016/2017 94% (34) of academic personnel (n=36) gained certificates for attending courses
8. Teaching courses, exchanging experience abroad		
17.	Oulu University, 2019	Rūta Melbārde Vāvere
18.	Tartu Health Care College, Nooruse 5, 50411 Tartu, Igaunija 2020	Mārīte Saulīte
9. Participation in professional organizations		
19.	Association of Emergency Medicine of the Republic of Latvia	Leonīds Afremovičs – member of certification commission
20.	Central Medical Ethics Committee of the Ministry of Health of the Republic of Latvia	Jeļena Urbēna - locekle
10. Participation in organization of further education events		
21.	Minimum hygiene requirements for the provision of beauty care services. (2019)	Provision of training. Teaching staff – I. Briža
22.	Topical issues in emergency medical care. (2019)	Provision of training. Teaching staff – L. Afremovičs.

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.

Qualification of the academic staff of the *Healthcare* study field complies with the requirements for implementation of study programmes in accordance with the *Law on Higher Education Institutions of the Republic of Latvia, Education and Vocational Education*. The following academic staff is involved in the study field: associate professors, lecturers, assistants.

Elected academic staff, as well as invited lecturers – professionals with in-depth understanding and practical experience in the field - are involved in the realization of the study field. One of additional criteria is a recommendation from health and social care providers and associations of the field. Reflection of the qualification of the academic staff in the reporting period is shown in table 3.6. In study year 2020/2021, 121 lecturers participate in realization of the field, 39 or 32% of them being

academic personnel and 81 or 68% are invited lecturers and one guest lecturer. The study direction is realized with participation of 5 lecturers with a doctoral degree in medicine, 2 lecturers with a doctoral degree in pedagogy, 1 lecturer with a doctoral degree in management sciences – educational management, 2 lecturers with a doctoral degree in engineering, 2 lecturers with a doctoral degree in biology, 2 lecturers with a doctoral degree in physics. 5 lecturers continue studies in doctoral studies. Currently 12% of lecturers have a doctor's degree, 69% lecturers have a master's degree 11% lecturers have a bachelor's degree, 5% lecturers have a first level professional higher education, 3% have a secondary professional education.

Table 2.13.

Number of teaching staff involved in the study direction

Position	2013./2014.	2014./2105.	2015./2016.	2016./2017.	2017./2018.	2018./2019.	2019./2020.	2020./2021.
Associate professors	6	6	7	7	7	9	9	11
Lecturers	26	26	28	29	27	26	26	28
Assistants	1	-	-	-	-	-	-	-
Guest Lecturers	-	-	1	1	2	1	1	1
Lecturers	62	98	97	107	99	94	89	81
altogether	**95**	**130**	**133**	**144**	**135**	**130**	**125**	**121**

In study year 2020/2021, in comparison with the previous study year, there have been significant changes in number and composition of the teaching staff involved in the study field. The number of elected assistant professors has increased by 1,8% and the number of invited lecturers by 2,3%, whereas the number of invited lecturers has decreased by 4,3%. During the reporting period, generations have changed, two of the academic staff terminated their employment, and 2 lecturers were elected as lecturers.

The workload of teaching staff consists of: management of study courses, updating of study courses, methodological work, scientific research and creative activities (participation in conferences, projects, research and preparation of publications, etc.).

Basic information about the teaching staff involved in realization of the study field can be found in Annex 5 of this self-assessment. See Curriculum Vitae Europass format for faculty members in Annex 6 of this self-assessment. For data on incoming and outgoing mobility of teachers during the reporting period see Annex 7 of this self-assessment.

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.).

To create and maintain a quality study environment and study process realization, as well as promote development of a quality culture, the college regularly explores the needs of students in

Healthcare field through surveys, also offers a solution for providing or improving of support. During their studies, LU PSK students are provided with - academic, career development and psychological support. Support for students does not depend on the place of implementation of the study process. This means that students receive the same support opportunities both at the main implementation place and at the branch. Support for students is provided in all study places, as well as support is available at the same level in both full-time and part-time studies, so far part-time studies in the college have not been realised. Support of students is provided in all study places.

Table 2.14.

Types of support for students of the study field Social Welfare and activities in their provision

Type of support	Activities or actions to provide support
Academic support	***Providing information on the study process and organization issues.*** • Students of the *Healthcare* study field can turn to the study secretary of the department of their study programme as regards issues about the study process. The secretary will provide the necessary consultation or refer to the responsible employee. • Responsible for organizing support: head of the department and study methodologist.
	Organization of informative classes for first-year students • At the beginning of studies at LU PSK, first-year students are invited to informative classes and meetings with college staff, and provided information necessary for successful study environment, study process and cooperation on various issues with administration, academic and general staff. During the presentation, which is organized for each course separately, information is provided about the college, structure, contact information for communication, study programmes and services available to students in the college. Students are informed about the procedure of mutual communication to ensure successful cooperation with lecturers. Students of the state budget study programme receive an explanation of the rules to apply for and claim a scholarship. Students are informed about the possibilities of drawing up study and student loans, international student ISIC cards, trips with a suitable discount in public transport. Information is provided on ERASMUS + mobility and involvement in the work of the College Student Self-Government. Students are also informed about the rules of procedure in the college territory and common areas. During the meeting, students are shown official communication channels of the college, providing a more detailed explanation of the structure of the college website. After the informative session, the content of the presentation in PDF format is sent to e-mails and handed over to students for use. • Persons responsible for organizing support events: Deputy Director for Studies, Head of the Department in cooperation with a public relations specialist.
	Involvement of students in student self-government. • Every student of the college has an opportunity to get involved in the work of student self-government or to participate in events organized by it. Student self-government is an elected, independent, collegial institution, which operates on the basis of *Regulations* and represents the rights and interests of college students within college. The aim of its activity is to represent and defend the interests of all students in the study process, cultural, social and everyday issues in the college and other state institutions. Participation in student self-government has improved its members' skills of teamwork, mutual communication, and organizing of events. It allows to clarify the needs of college students, to promote quality study environment and a more active student involvement in the study process. • Persons responsible for organizing support events: the public relations specialist, who regularly maintains contact with the student self-government, provides consultations on various issues.
	Submission and review of proposals and complaints, cooperation with the Ethics Commission • Procedure for submitting and reviewing of proposals and complaints of college students takes place in accordance with the *Approved Rules of Procedure* of the meeting of the College Council on May 14, 2020, (*protocol no. 2*). The procedure does not apply to applications for tuition fees, termination of studies, results of a collegial decision (admission commission, commission for recognition of study results, scholarship award commission, state final examination commission, etc.), and also complaints that are unfounded, abusive or misleading. essentially. Applications can be submitted electronically or in writing. • In situations where there may be unethical conduct and disagreement between students and academic or general staff, the parties involved have the right to appeal to the College Ethics Commission, an independent, collegial and independent body approved by the Ethics Commission in the meeting of August 29, 2029 2019, protocol Nr. 4. • Persons responsible for organizing support events: Deputy Director for Legal Affairs in cooperation with the Head of the Department, LU PSK Ethics Commission.
	Organization of consultations • During study process, students have a right to receive additional consultations outside the time of lectures or practical classes, in coordination with the lecturer. • By participating in a research project working group, a student cooperates with a lecturer in the development process. Consultations with an industry expert can be organized outside of college. • For successful participation in conferences, a student cooperates with the assigned lecturer in preparation of the report.

Support for career development	***Career development activities, motivation for conscious and successful career development.*** • A set of activities that encourages college students to become independent thinkers and motivates them to take responsibility for their future careers. To achieve this goal, college organizes career events and activities, during which students receive information about various directions of career development, which promotes the acquaintance of young specialists with employers and potential internships. • In co-operation with higher education institutions, meetings are organized with teaching staff to strengthen students' understanding and the need to continue obtaining higher education even after graduating from college. • Organized meetings with college graduates, during which students can hear of different experiences and have an opportunity to get to know the daily life of the specific specialty from the point of view of working in the field. • Persons responsible for organizing support events: head of the department, study methodologist, academic staff in cooperation with a public relations specialist.
	Participation in events for development of students' professional skills and abilities. • Examples of good practice that strengthen the student's knowledge and skills as a prospective specialist are the participation of students in both local and international professional competitions and Olympiads for medical college students. In such events, participants' theoretical knowledge and practical skills in the specialty are tested and evaluated, for example, International Student Olympiad "Massage Skills" (Latvia), International Competition for Healthcare Study Program Students (Latvia), International Student Mastery Competition*"International Students Massage Championship*", (Lithuania), u. c.. • Participation of students in career support events outside of college, where those interested have an opportunity to demonstrate professional skills and abilities acquired during study process. These are educational exhibitions of various scales, career days in schools, professional parades. In such events, students additionally improve their communication skills with a target audience of different ages, promote public understanding of professions and competencies in the field of healthcare. • Persons responsible for organizing support activities: academic staff in cooperation with a public relations specialist.
	Gaining experience in guest lectures, seminars, trainings. • To provide a more in-depth knowledge and promote understanding of current topics included in the study course, guest lectures or seminars are organized for students, led by professionals in the field of social welfare or representatives of organizations representing the field. • Study excursions to organizations and institutions are organized during studies to get acquainted with the work environment and develop competencies of the acquired qualification. • Experience in emergency training for operational services gives students the opportunity to observe the work of professionals and mutual cooperation in rescue work in difficult situations. • Persons responsible for organizing support events: the head of the department in cooperation with the academic staff.
	Organization of experience exchange trips and meetings with students from foreign partner universities. • Gaining additional experience outside the usual study environment is considered an important opportunity in the study process of each future healthcare specialist. Experience exchange trips are organized for students of the study direction "Healthcare". During these students get acquainted with a partner university and its experience in organizing study process in healthcare study programmes. Students participate in lectures, discussions and master classes, get acquainted with the university work environment and material base. Participation in such trips encourages students to take advantage of the opportunities offered by the ERASMUS + mobility program. Students of the study field "Healthcare" have visited *Tartu Health Care College* (Igaunija) and *The President Stanislaw Wojciechowski Higher Vocational State School in Kalisz* (Polija). • Opportunity to house representatives of a partner university provides students of LU PSK with an opportunity to acquaint students of foreign healthcare programmes with the college, study environment and processes, as well as to improve communication and foreign language skills. Discussions and master classes can be used to exchange experiences. Cultural activities are organized as frequently as possible. Students of the "Healthcare" study field have hosted groups of students from *Tartu Health Care College* (Estonia), *The President Stanislaw Wojciechowski Higher Vocational State School in Kalisz* (Poland), *IFITS* (France), *The Basic Health Care College Fredericia-Vejle-Horsens* (Denmark). • Persons responsible for organizing support events: head of the department, academic staff, public relations specialist in cooperation with the external relations coordinator.
	Seminars on ERASMUS+ mobility experiences • Opportunity to discover professional and personal experiences gained by students in qualification practice outside Latvia within the ERASMUS + mobility program. This type of event motivates one to dare and use the opportunity provided. Students' stories confirm that during the mobility period self-confidence of the person was built, knowledge of foreign languages and professional skills were improved, new friends were made and culture of other countries explored. • Persons responsible for organizing support activities: public relations specialist in cooperation with the external relations coordinator.

Psychological support	***Creating and maintaining a supportive environment in college.*** • During the study process, a student may face various complications of a private nature, which may affect the course of studies and his/her full involvement in the study process. Conflict situations can arise during studies. When starting studies at the college, students are informed about cooperation with the course curator. • Persons responsible for organizing support activities: depending on the situation, the curator can involve the head of the department, academic or general staff in solving a specific issue.

External relations coordinator, who cooperates with academic and general staff and the student self-government, is responsible for admission of students of foreign cooperation universities of the LU PSK and organization of the necessary support within the ERASMUS + mobility within the college. When arriving for mobility, students are organized a tour of the study environment of the LU PSK, during which the infrastructure of the college is shown, acquaintance with immediate surroundings organized. Students are introduced to the course of mobility in accordance with the previously agreed program, a meeting with those responsible for organizing mobility outside the college is held. Incoming students are provided with practical information about public transport, availability of public services, cultural events, etc. current affairs. Mobility participants have an opportunity to employ the services provided by the LU PSK library and service hotel. For college students to have an opportunity to get acquainted with students of partner universities, various events are organized - international evenings and joint excursions along different routes. Mobility students are also invited to participate and get involved in events organized by student self-government. Implementation of ERASMUS + mobilities supports attendance of local cultural, artistic, musical or sporting events, which the college strives to include and provide within the framework of the program.

LU PSK in cooperation with the responsible organizations periodically inspects and evaluates the infrastructure on the accessibility of environment for students with disabilities. Recommendations are considered in improvement of the existing study environment, as well as in the design and construction of new study buildings.

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).

LU PSK in cooperation with professional associations, local governments and public organizations provides directions of scientific research in accordance with the requirements of the labor market. Students have an opportunity to learn the basics of scientific research work in a theoretical course, during the development of qualification papers (documents are available on the college website www.psk.lu.lv (Only Latvian)), participating in various projects (project competition regulations and forms are available on the college website www.psk.lu.lv (Only Latvian) in the " Scientific research projects " section) and inter-college research in Latvia and the European Union.

The aim of study programmes in *Healthcare* field is to prepare highly qualified specialists for work with various target groups, develop communication skills for working with clients in an interprofessional team that resonates with research strategy - Health, environment, lifestyle.

Academic staff of the college has acquired professional competence development programs (For example: *General competencies of a teacher*, *Content of Education and Didactics*), and cooperates with the University of Latvia in scientific research, organizes conferences and publishes theses (within the framework of the University of Latvia International Scientific Conference), cooperates with state institutions, professional associations, non-governmental organizations and Jūrmala local authorities. Ensuring the continuity of study process, seminars, guest lectures and research projects are organized. The direction of scientific research of the study field corresponds to the development goals of the University of Latvia and is corresponding to the study field and branch.

Summarizing scientific research activities of the study field:

- since 2016, organization of international scientific conferences;
- participates in the sections of the International Scientific Conference of the University of Latvia “Interdisciplinary Research in Medical Colleges”;
- improvements in the procedure for the development and course of qualification papers, development of evaluation criteria;
- participation of academic staff in professional development programmes;
- since 2018, there has been interprofessional cooperation in the organization and conduct of scientific research projects;
- academic staff is active in professional associations.

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 most cases, scientific research of the academic staff is related to the specialization of the lecturers within the programme and lecture courses to be taught. Research carried out by the academic staff is a significant contribution both to the development of the field they represent, and also of the study programme, as well as improvement of study content. Through research, lecturers bring most relevant novelties to their study courses.

LU PSK has organized the following projects in the framework of the study direction:

- In 2014, “Health of Young People Studying at the Medical College and Habits Affecting Them”, in 2015, "Changes in the health of students at the Medical College during their studies".Within the framework of the projects, students of Medicine study programme under the guidance of Assistant Professor Rita Geske, performed anthropometric measurements of students and organized surveys on health promotion, Biomedical laboratory assistants under the guidance of Assistant Professor Alevtīna Leice performed blood composition and lipid examinations. Results of the research were reported at local and international conferences, theses and articles were published (see Appendix No.8). Within the project, the Spirometer MiniSpir was purchased and used in the study process after the project - a portable, computer-connected device for spirometry tests, professional scales Tanita SC330S with medically verified computer program GMON MA, pulse oximeters and tonometers.
- In 2016, results of the project “Evaluation of impact of focus detector distance on the image quality in radiography of the nasal cavity” are continued by students of the Radiographer study programme in their qualification works. Students compile and develop the protocols necessary for the work environment, determine the quality criteria in the pictures. The study was conducted in collaboration with the Riga East Clinical University Hospital, Pauls Stradiņš

Clinical University Hospital and the teaching staff of the Medical Faculty of the University of Latvia.

- In 2016, in the project “Evaluation of the effectiveness of a multidisciplinary cardiac rehabilitation, prevention and education program for respondents aged 30 to 50 without a previous cardiovascular event” college students and academic staff collaborated with the University of Latvia, Faculty of Medicine, Pauls Stradins Clinical University Hospital, Physical Medicine Department, RSU Biochemistry Laboratory and Latvian Folk Sports Association.
- In 2017, in cooperation with VISA NRC “Vaivari”, a study “Patient care levels and physical activity during inpatient rehabilitation” was conducted, where students evaluated patients by timing activities. The project is related to the strategy of the Latvian Nurses' Association on the development of a patient classification system and the introduction of care levels in a practical environment.
- In 2017, a study “Assessment of the Need for Medical Foot Care in Social Care Institutions” took place in the Podology study programme. According to the information gathered in the project, students continue to implement podological foot care for clients of a social care institution. For the needs of the project, 2 pedicure devices RUCK Podolog NOVA were purchased and used in the study process.
- In 2018, a collaborative study “Improvement of the Physical Rehabilitation Process” of Medical massage study programme with Sports Rehabilitation Specialist Rolandas Lagocki (graduate student of the Moscow State Sports Academy), Restoration of Human Psychophysical Condition, author of rehabilitation methodology (author S. Momots and R. Lagockis).

Research projects of the college are funded from the college budget. In the academic year 2019 -2020, college budget allocated funds for starting an infrastructure project, so no competition was organized for the implementation of college research projects, but there was support for publication of scientific articles, participation in conferences and other projects such as Erasmus + and NORD PLUS were supported.

Guest lectures are organized for the academic staff and students within respective study field:

- Guest lecture of Dainis Krieviņš, Professor of the University of Latvia and Director of the Pauls Stradiņš Clinical University Hospital and Science Department on “Ethical Principles of Clinical Research”, February 4, 2014;
- Guest lectures of Dr. med. Mārcis Leja “Screening and prevention options for colorectal cancer” and “Clinical research”, April 24 and 25, 2014;
- Svetlana Rudnicka, Head of RAKUS Invasive Radiology Department, Zane Kaprale Johnson & Johnson AB Latvian Branch, Product Specialist, CORDIS, Guest Lecture "Invasive Cardiology and Invasive Radiology Laboratory Leading Nursing Program: ", March 18, 2014;
- Guest lecture of Dr. sc. soc. Signe Mežinska on “Qualitative research methods”, February 22 and 29, March 7, 2015.
- Guest lecture of vascular surgeon V. Lapikova Klinikum Niederlusitz (Germany), March 6, 2015;
- Guest lecture, Head of the Narcology Assistance Service of “Riga Psychiatry and Narcology Center”, chief specialist of the Ministry of Health Dr. Astrida Stirna for students and teaching staff on “Tendencies of intoxicant use in Latvia, problems and solutions”, April 20 and 21, 2016;
- Guest lecture of Dr. sc. soc. Signe Mežinska on “Qualitative research methods”, January 18 and 30, 2017;
- Guest lecture of Dr. Doctor of Pedagogy Sanita Baranova and Professor Rudīte Andersone on

continuing education “Pedagogical aspects of study program development in higher education” Peda T141 course code, September 12-14, 2017.

- Guest lecture of Dr. Maija Māliņa on “Types of Pain and Basic Principles of Treatment”, April 26, 2018;
- hist., Rezekne Academy of Technology lecturer Peter Kivrans lecture “Professor Pauls Stradiņš (1896 - 1958) in life and work”, January 24, 2019;
- University of Latvia assoc. Professor, Pauls Stradiņš Clinical University Hospital Chief Physician in Acute Cardiology guest lecture “Care of Cardiology Patients in Surgical Treatment of Heart Failure”, Assoc. Prof. P. Stradiņa, Dr.med. M. Kalēja and Dr. M. Ērglis guest lecture “Patient care in cardiac surgery”, September 29, 2020.

As part of the College's Jubilee Year, academic staff and students resumed historical research. Result was an anniversary edition - “Values. Experience. Development. P. Stradiņš Medical College of the University of Latvia 1939 - 2019 ”, ISBN 978-9934-8822-1-0.

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.

During the reporting period, *Social Welfare* study direction of the LU PSK participated as a cooperation partner in four projects administered by the European Union lifelong learning programmes - ERASMUS + and Nordplus. Lecturers and students of the Nursing study programme were purposefully involved in implementation of the projects. It is a widely represented field of study among existing cooperation partners of the college, which offers new solutions for improvement and strengthening of students' professional competences. Cooperation partners are actively involved in implementation of projects related to various industry-related topics. College administration qualitatively evaluates project proposals of the cooperation partners and decides, whether to participate in them.

The ERASMUS + programme project e-MEDPASS is for the promotion of innovations and exchange of good practice in the field of studies. As a result of qualitative cooperation, a new tool for evaluating students' practical knowledge and skills has been adapted and adapted, together with practice institutions (Table 2.15). Lecturers were involved in the implementation of the Nordplus project due to the number of foreign students who come to the University of Latvia PSK every academic year to implement various types of mobility. Study programmes in this field admit about 70% of the total number of foreign students. A multicultural environment is a challenge for every lecturer and practice mentor to ensure the quality of mobility requirements for a multinational group of students.

Participation in international projects ensures integration of innovations in the study process, updating of programmes and exchange of experience. Sustainability and succession in implementation and realization of projects is assessed, taking into account the feedback of the target audience.

Table 2.15.

International projects realized in the *Healthcare* study field

Programme	Title, period	Short description of the project goals, the results achieved	Coordinator/partners/budget of the project
ERASMUS+ KA203	*"The eMedication Passport – cultural adaptation of learning tool for ensuring the development of medication competence of graduate nurses (eMeD-PASS)."* *Nr. 2017-1-EE01-KA203-034884, 01.09.2017. – 31.08.2020.*	*The aim* is to improve the safety of patient care in the Baltic States and Finland by educating nurses in pharmacology and drug administration using an e-medical passport. *Achieved result* - a study on the knowledge of pharmacology for students of the "Nursing" study programme in Finland and the Baltic States; adapted, improved and introduced e-medicine passport for testing and strengthening students' medical therapy competence. The online platform is prepared in Finnish, English, Swedish, Latvian, Estonian, Lithuanian. https://www.laakehoitopassi.fi/pages/home/lan:eng/	*Coordinator*: Tartu Health Care College (Estonia), *Partners*: P. Stradins Medica College of the University of Latvia (Latvia), Kauno University of Applied Sciences (Lithuania), Turku University of Applied Sciences (Finland). *Total funding*: 150 729,50 EUR. *Participants from LU PSK*: Iveta Strode, Ināra Dupure, Aiga Grauduma
NORDPLUS	*"Study quality in terms of multiculturalism in the Baltic Countries".* *Nr.NPHZ-2017/10151, period 09.2017 – 12. 2018.*	*Goal* - to create a study quality assurance model for lecturers within the framework of multiculturalism. *Achieved result* - a manual for lecturers to ensure high-quality studies in a multicultural environment; conference organized by Tallinn Health Care College (Estonia).	*Coordinator:* Estonian Entrepreneurship University of Applied Sciences *Partners*: Tartu Health Care College (Estonia), Tallinn Health Care College (Estonia), Lääne-Viru College (Estonia), Utena College (Lithuania), Turiba University (Latvia), Karalius Mindaugas Vocational Training Center (Lithuania), P.Stradins Medical College of the University of Latvia (Latvia), Latvian Higher Education Export Association (Latvia), Estonia Integration and Migration Foundation Our People (Estonia) *Total funding:* 54 112.00 EUR *Participants from LU PSK:* Aiga Grauduma

In the upcoming period, it is planned to implement ERASMUS + KA2 Strategic Partnership projects.

2020/2021 The ERASMUS + program project "Digital technology for Nursing Education & Training (DTNET)), where the lead coordinator is a German partner, and the participating higher education institutions from Sweden, Austria, Lithuania and Latvia, have been approved. The aim of the project is to create and implement a virtual reality product in the study program "Nursing" and "Medicine". In Latvia, this tool (3D glasses with a custom scenario) will be integrated into the study process of the study program "Medicine". The end of the project is May 2023.

In order to involve employees in international research and study programs in the actualized issues, the teaching staff and students of the study programs "Medical massage" and "Esthetic cosmetology" will work in the NORDPLUS project "Wellness". Project coordinator Lithuania, together with partner universities from Estonia, Finland and Latvia. The aim of the project - students, together with the teaching staff, create a well-being business module, which is adapted to each country. Within the framework of the project, master classes are conducted for students, information and training support is provided to prevent the result.

Lecturers of the study field "Podology" of the field of study train medical students at Tartu Health Care College within the framework of the project of the Estonian Ministry of Education. During the theoretical and practical lectures, students acquire a basic information course in medical foot care.

At the beginning of 2021, information on the preparation of research projects and the development program "Radiologist Assistant" was updated, which is currently being implemented. Membership in EFR (European Radiographers Federation) provides students with information on current industry news. In February 2022, it is planned to submit projects that would improve the research activities of the study field Healthcare.

According to Erasmus University Charter in Higher Education for the period of 2021–2027 approved by the P. Stradins Medical College of the University of Latvia, one of the points of internationalization plan and the Charter Policy is participation in international projects. Thus, evaluating the qualitative criteria - compliance of the study programme and the goal of the project with the vision of the college, it is decided to participate in the project.

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.

In scientific research, LU PSK operates in accordance with the College Regulations and the strategies approved by the College's Science Council. Strategies include sections on priority research areas in study programmes. For example, thanks to cooperation with the University of Latvia and the State Research Programme No. 2014-10-4 / VPP-6/41. symposia and thesis collections have been created with the support of the GEO project: 74th Scientific Conference of the University of Latvia, state research programme RESPROD - Health Care Research in LU Colleges, 75th Scientific Conference of the University of Latvia, state research programme RESPROD, Health Care Research in LU Colleges and section of 76th International Scientific Conference of the University of Latvia - Interdisciplinary Research in Medical Colleges. Within the framework of this support, students gained the opportunity to acquire new knowledge from academic staff of colleges, experience from research conducted in Latvia and in the world.

Outside funds (collaboration partners) and LU PSK resources are used for research. The amount of funding for internal research projects is allocated annually in the budget planning process of the LU PSK, in accordance with the financial possibilities and the topicality of research direction. During the period, five internal research projects were developed. LU PSK supports participation of academic staff in scientific conferences by granting paid leave. Information on scientific research (creative) work of the academic staff, topic of scientific research and its connection with the content of the study field and corresponding study programmes and in accordance with the research strategy - *Health, Environment, Lifestyle* is as follows: 2014 - Health and Social Care Aspects in Gerontology ; 2015 - Youth Health and Influencing Habits; 2016 - Addiction as a Topical Problem in Modern Society; 2017 - Physiological and Psychosocial Aging Processes and Quality of Life; 2018 - Pain. Patient Care Levels and Inpatient Physical Activity; Work Environment Risks for Social Work Specialists in Social Care and Social Rehabilitation Institutions; 2019 - Biopsychosocial Model in Care; 2020 - A Multidimensional Approach to Patient Care. Image quality criteria and X-ray protocol development. Public health. Therapeutic foot care.

Research strategy and directions provide opportunities of scientific work for students and academic staff. In all these directions, development and further education of the academic staff is possible. Research carried out by the academic staff is a significant contribution to development of the field representing them, as well as development of study programmes and content. Through research, lecturers bring the most relevant industry novelties to their study courses. Lecturers prepare scientific articles, participate in conferences, seminars, develop methodological materials *(Table 2.16.)*.

Table 2.16.

Participation of academic personnel (elected in LU PSK) (n= 36) in publications, conferences

Activities of academic staff during the reporting period	
Activity and data summary	**Example**

International publications - (40)	2019. Saulīte, M.; Andersone, R. Career education as a set of planned actions integrated in the study process. REEP, Proceedings of the 10th International Scientific Conference, Vol.12. ISSN 2661-5207, p. 303.-308. Latvia University of Agriculture 2019, Jelgava. DOI: 10.22616/REEP.2019.040. Pieejams:http://llufb.llu.lv/conference/REEP/2019/Latvia_REEP_2019_proceedings_online.pdf.
Scientific articles in peer-reviewed journals - (53)	2020. Pupure J., Grauduma A., Bruus I., Teuri R., Dupure I., Strode I. The Experience of nursing students, mentors and teachers in the eMedication Passport use in clinical practice: a feedback from survey. Nurs. Educ. Today, submitted.
Theses - (80)	2018. Strode, I., Dupure, I., Grauduma, A. Perspective assessment of medical care competence of nursing students. International scientific conferences “Health. Wellness. Practice." collection of theses, 2018., 13-14.
International conferences - (154)	2019. The International Scientific conference "Education and Practice", P.Stradins Medical College of the University of Latvia, Jūrmala, 23.05.2019., Nr. of certificate 1.31/7-167.
Local conferences - (227)	2018. Latvian Association of Medical Microbiologists Conference "Together against antimicrobial resistance", Ministry of Health of Latvia, Riga, 22.11.2018., 8TIP.
International projects - (2)	The eMedication Passport – cultural adaptation of learning tool for ensuring the development of medication competence of graduate nurses (eMeD-PASS), project Nr. 2017-1-EE01-KA203-034884, projekta periods: 01.09.2017. – 31.08.2020., participants: Tartu Health Care College (Estonia), Turku University of Applied Sciences (Finland), P.Stradins Medical College of the University of Latvia, Kauno Kolegija (Lithuania).
Local projects - (10)	2016.- 2018. P. Stradinš Medical College project “Changes in the health of young people studying at the Medical College during their studies”.
Methodological materials developed – (8)	Team of authors, *Practical recommendations of onychomycoses*, Saulīte, M., Ivanova, T., Nod. Podological onychomycosis care. Riga: RSU izdevniecība. 2014.

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.

To promote the development of the profession, professionals in the field must encourage development of research. Involvement of students in scientific research work, connection of scientific research topics with study goals and expected study results is important. Physicians help clients and / or patients to overcome a variety of prevention and health problems by researching patients' problems, difficulties, and resources (care) through a science-based treatment process.Starting from the first year of study, students prepare term papers, methodology of research paper development is mastered within the framework of “Research” course, which allows students to implement the acquired research methods in the process of qualification paper development. Writing qualification papers is considered the most significant contribution to improvement of student research and creative activity. Student research and / or creative activity is related to realization of various internal projects of LU PSK (Health of young people studying at the Medical College and habits influencing it. Evaluation of the effect of focus detector distance on image quality in nasal sinus radiography. Patient care levels and physical activity during inpatient rehabilitation. Assessment of the need for medical foot care in social care institutions. Evaluation of factors influencing cardiovascular disease in young people. Reading strip tests using a digital camera. Evaluation of the effectiveness of a multidisciplinary cardiac rehabilitation, prevention and education programme.) as well as in international activities (for example, students of the Medical Studies study program 2013/2014. in the academic year organized and summarized the results of the research Poliempreende, a project in collaboration with Escola Superior de Enfermagem de Coimbra Portugal). Research and / or projects implemented within the study programmes promote

the strengthening of students' competitiveness.

In the reporting period from 2013/2014 academic study year until 2020/2021, 1121 new specialists in the *Healthcare* field have graduated from the LU PSK. To promote development of each profession, professionals in the field participate in final examinations and promote development of research.

The largest quantity of qualification papers were written in 2018./2019. and 2019./2020. academic year. In general, qualification papers covered topics on health and acute situations, but emotional and mental health have been the most studied in the treatment process. The results of the research are reflected in the collections of theses of the LU PSK. Research is organized in educational environment, healthcare institutions, in the outpatient sector and in the healthcare environment. According to the authors of qualification papers, one of the benefits of the research developed was the use of new methods and assessment tools in professional work. For example: Development of a protocol in the radiographer study programme, Development of documentation in the practice of a podiatrist, determination of patient care levels, assessment of patients' pain and fall risk. The research topics reflect the research topics of the study field. In recent years, students have been actively cooperating in the field of health care. Biomedical laboratory students cooperate in the development of research with students of Esthetic Cosmetology, Medicine and Podiatry. For example: Diversity of microorganisms on the rings during the provision of beauty services. Testing of make-up brushes and effectiveness of cleaning products. Information about the results of college students' research work is presented in table 2.17.

Table 2.17.

Information about the results of college students' research work

	2014	2015	2016	2017	2018	2019	2020	2021
Number of international conferences organized at the college	-	-	2	2	3	4	2	2
Number of local conferences organized at the college	4	4	6	5	1	1	-	2
Conference collections	1	-	1	2	2	2	1	1
Number of scientific collections of the college	-	-	1	-	-	1	-	-
Number of internal projects	1	2	3	1	3			
Total number of qualification papers	116	133	159	174	165	176	175	23

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.

During study process, attention is paid to innovative solutions. Within framework of product innovation, various technical improvements are made, material and technical base (library resources, projectors, etc.) is improved, new databases (EBSCO) are purchased. A plan has been laid out to supplement electronic resources and create a new e-platform, intended for posting materials related to the study process.

Lecturers use the manual prepared within the framework of the NORDPLUS project Nr.NPHZ-2017/10151 for high-quality study provision. The e-medicine passport created within the framework of the Erasmus + main activity “Cooperation for the promotion of innovation and exchange of good practice” is successfully used by the students of the medical study program to test the competence of students in medical therapy. Professional scales purchased in internal scientific projects - Tanita SC330S with medically verified computer program GMON MA are also successfully used by students of esthetic cosmetology and therapeutic massage study program in nutrition training course and assessing clients 'and / or patients' health indicators. Students use the CCL-215 microcamera with skin and hair diagnostics software and DM500 phase contrast microscopes in their research. The Mammomat 3000 Nova mammography equipment used in the practical classes of radiographers is also used by the students of the medical study program, learning how to prepare patients for the procedure. Due to financial reasons, the college was coerced not to announce an internal scientific competition in 2019, continuing the distance learning process, in 2020 the competition was not announced either. Evaluating the benefits of the cooperation process between students and academic staff during the project implementation, it is planned to return to the organization of the competition after the pandemic time.

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.

The aim of the study direction is to prepare competitive health care specialists for the Latvian and EU labor market, based on the requirements of the labor market and using modern teaching methods and achievements in research and science. Cooperation between educators and labor market representatives and professional associations is essential to promote this goal and ensure the successful integration of young professionals into the dynamic labor market.

The aim of cooperation is to create feedback between the college and employers in order to ensure that the knowledge and skills of the graduates of the program correspond to the needs of the labor market. The cooperation is implemented in several directions:

- provision of practice,
- ensuring unity of education and practice,
- implementation of research and projects.

The study programmes included in the study direction closely cooperate with professional associations and employers' organizations, which provide students with internships in the study programme to strengthen theoretical knowledge and improve the practical skills acquired in college in a real professional environment.

For example, the main partners involved in implementation of the Radiographer study programme

are professional associations in the field: the Latvian Association of Radiographers and Radiology Assistants as well as the Latvian Association of Radiologists. In the study program Podology there is cooperation with the Latvian Society of Podiatrists and in the study program Biomedical Laboratory with the Latvian Association of Laboratories.

By preparing specialists of the field necessary for the labor market, qualified specialists from employers' institutions are attracted as teaching staff for the acquisition of theoretical and practical skills, thus ensuring the reflection of the specifics of the field for students already in the study process. At the same time, offering students opportunities, in parallel with the study process, to start working in the chosen field of study. For example, measures to limit the spread of Covid-19 infection in connection with the provision of public vaccination coverage by attracting students as future professionals in the field.

The College's cooperation with various Latvian institutions is also of great importance in creating joint educational and further education activities. For example, in the fields of beauty and therapeutic massage, the International Scientific Conference “Health. Wellness. Practice." Within the framework of the conference, students gain the opportunity to acquire new knowledge and industry news from specialists on an international and local scale. The conference organizes master classes, where academic staff and industry specialists present the latest evidence-based technologies.

In cooperation with other medical colleges and the University of Latvia, an international scientific conference is organized, which includes a section on “Start-up research in medical colleges”, which involves students, lecturers and employers' representatives to gain new insights and experiences related to current industry trends. In Latvia and in the world

Cooperation with the Universities of Latvia is also important. For example, in cooperation with Riga Technical University (RTU), using the Laboratory of Medical Engineering and Physics, practical training is provided to students in the study course Quality Assurance and Control in Radiography. In cooperation with the Faculty of Medicine of the University of Latvia (LU), students can continue their studies in the bachelor's study program Radiography, implementing studies in the later stages of studies.

Cooperation partners are selected on the basis of acquiring the competencies provided for in the professional standard of the acquired qualification, as well as in order to practically master the current issues in the industry, the rapid development of modern technologies and the quality of related services.

Cooperation with employers and professional institutions gives students the opportunity to become involved in their future professional activities. For example, already during the study process, students can get involved in professional associations. Thus, students can attend meetings organized by associations and gain additional knowledge in their professional field.

Professional associations, in cooperation with college study programs, develop joint continuing education activities. For example, students of the Department of Medical Technology can participate in the annual, interdisciplinary conference “Professional Competences in the Age of Modern Medical Technology” organized by the Department and professional associations. Every year, the conference provides the latest information on the importance of interprofessional cooperation. Students, together with their supervisor, can also take part in the conference, presenting the results of their work to the conference participants (industry professionals and also students) and contributing to professional research.

Such an opportunity very well reflects the goals of the study direction, as well as the goals of the study programs.

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.

The main goal of the LU PSK internationalization plan is to provide teachers and students with an opportunity to gain and improve professional experience in an international environment and to promote personal growth by actively participating in various types of mobilities and projects. The overall objective of the ERASMUS + programme for each Member State is to increase the number of mobilities (students, teachers) in order to ensure a wider transfer of knowledge and competences in the sector. Participation of the teaching staff in the ERASMUS + programme ensures involvement in a discussion with industry professionals abroad, exchange of experience in an intercultural environment, an opportunity to visit practice institutions of cooperation partners.

Strategically, visits of foreign lecturers to the college provide students who do not go on mobility an opportunity to hear a professional of the field, participate in discussions on current issues in the field, as well as gain information about experiences of other countries. Participation in international projects is one of the cornerstones of internationalization, which promotes interaction between the educational institution and companies in different partner countries. The goal of student mobility in the period of the program 2021 - 2027 is to reach 5% of the total number of students participating in activities of the ERASMUS + programme. The total teacher mobility indicators are currently at an average of 15 people a year going abroad. The goal for the next period is to provide 20 teachers an opportunity to participate in an experience exchange or teaching activity. When LU PSK works in the direction of healthcare, it is necessary to constantly improve and follow innovations in order to prepare highly qualified future professionals. Implementation of the internationalization plan is also important due to the fact that the college is the only one in Latvia to realize study programmes *Radiographer*, *Podology* and *Biomedical laboratory assistant*. To improve the programmes, update the methods and techniques used in study process, it is necessary to cooperate with educational institutions of similar content. This is not possible in Latvia, therefore foreign universities and companies are especially evaluated and selected for establishment of partnerships.

To improve study process of the *Healthcare* study direction in an international environment, mutual cooperation agreements or agreements of intent with universities and companies are purposefully concluded. The direction of health care is limited in terms of the number of cooperating universities, because, for example, there is mutual cooperation with all medical colleges in Lithuania and Estonia.

Attracting of foreign lecturers in the *Healthcare* field to conduct guest lectures or exchange experiences is organized in accordance with the basic principles and strategic priorities of the Erasmus University Charter. Mobility activities of foreign students in Latvia are also realized. The following steps have been identified as motivating.

1. LU PSK has obtained the Erasmus University Charter in higher education, which enables teachers and students to participate in all types of activities provided by the ERASMUS + programme - mobility, participation in an international project. Period of validity of the

Erasmus University Charter is 2021 - 2027, identification code - LV JURMALA03.

2. ERASMUS + activities are conducted in accordance with the following principles of the Erasmus University Charter: to respect the processes of non-discrimination, transparency and inclusion in the programme; to ensure the quality of mobility activities and projects based on the application and implementation phases; to implement study and teaching activities only within the framework of previously signed cooperation agreements. These agreements define responsibilities and obligations of the parties involved, as well as the criteria for selection, preparation, admission, support and integration of participants.
3. Selection of cooperation partners, in accordance with the criteria: both parties involved implement similar study programmes; in case of studies, the partner higher education institution has an Erasmus University Charter, in case of internship - company complies with the requirements for realization of professional and qualification internship tasks; the language of communication is the same for both parties; parties are interested in increasing qualitative and quantitative indicators of study process; opportunities to provide appropriate and high-quality practice places; conclusion of a mutual cooperation agreement, which determines the obligations, duties, responsibilities of both parties, the number of mobility participants in the sector.
4. Mobility is implemented in accordance with study / practice mobility agreement for students, teaching / experience exchange mobility agreement for teachers, which is specified, agreed on and signed before the implementation of the activities.
5. Quality project management ensures a transparent process before, during and after the mobility. The report provided by each participant on the gains or losses during the activity period is evaluated.

Foreign lecturers are motivated to come to Latvia for experience exchange and teaching activities. A specific number of persons detailed in cooperation agreements is allowed to visit the partner country during one ERASMUS + project period, provided there is sufficient funding under the heading "Teacher mobility". Study year 2020/2021 introduced changes in active mobilities. In the autumn semester of this study year, foreign lecturers taught virtually, using online platforms. Gradual transition to a digital environment at the LU PSK promotes the college to be more open and flexible in organizing online events.

There is a consistent system for attracting foreign students to realize mobility in Latvia. Students abroad take part in a competition at their higher education institution to obtain the right to move to a chosen partner country. LU PSK is chosen by students who have received positive feedback about previous mobilities, who know what opportunities there are to improve and acquire new skills. Foreign students tend to return to mobility. All study programs of the *Healthcare* study field are binding due to quality of practice. Students realize their internships in largest healthcare institutions in Latvia, providing access to professional environment.

6. The aim of International Weeks at the University of Latvia is to effectively attract foreign teaching staff. The first international week took place in September 2017, with the intent of sharing experience and examples of good practice with cooperation partners, promoting knowledge transfer, as well as introducing partners to Latvian culture. The second international week took place in May 2019. During these weeks, teaching staff of the existing and new cooperation partners attended the college, gave guest lectures to students, visited internships and got acquainted with the national culture. A purposefully organized event for the involvement of foreign teaching staff in the study process, which provides students with an opinion of a professional on a current topic.
7. At the January 21, 2020 meeting on *Approved Procedures for Academic and General Staff to Apply for ERASMUS + Mobility Funding Abroad, Selection Procedures and Academic*

Recognition, the LU PSK college council determined the involvement of foreign teachers in the study process.

8. In accordance with the bilateral cooperation agreement, nominations for incoming students are sent out. After evaluating the set criteria for the implementation of practice or study mobility, a decision is made on the progress of the process.
9. Cooperation partners organize group trips to the LU PSK with the purpose to educate, exchange experiences and establish new contacts. In the academic year 2013/2104, when students and teachers of Polish partner establishment Panstwowa Wyższa Szkola Zawodowa Wojciechowskiego w Kaliszu visited Latvia, and students of the college went on a return visit. A repeated experience exchange took place in 2015. Students of medicine from Tartu Health Care College (Estonia) with their coordinator visit the college yearly, to get best acquainted with the *Podology* study programme. In 2019 Nursing study programme hosted a study group from IFITS (France). As a result of mutual visits, one of the foreign students is motivated to return to Latvia to participate in ERASMUS + internship mobility.

LU PSK's international collaboration partners - universities and companies are from the European Union member states and Turkey. Bilateral cooperation agreements, which are active in the long term, have been concluded with 30 institutions. They ensure integration of the college into the network of higher education institutions. Before concluding a collaboration agreement, study visits are organized to ensure compliance with the quality partnership (see Annex 9).

The study year 2020/2021 begins with the definition of new quality criteria - to evaluate the digitization process, nature-friendly environment and supportive society. The new Erasmus University Charter period sets out an even better and more environmentally friendly strategy.

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 LU PSK Internationalization Plan and co-operation agreements in the *Social Welfare* study direction ensure the attraction of foreign teachers and students within the ERASMUS + programme framework, observing the principles of the Erasmus University Charter. Bilateral agreements between them determine the number of incoming and outgoing mobilities to the partner school. Higher education institutions operating in international projects comply with this rule, therefore mobility participants are selected through a competition. The partner school sends a nomination, the host institution assesses its capacity for mobility and responds. From then on close co-operation and communication with external relations coordinators takes place regarding the specification, organization, management and supervision of tasks. It is considered that the number of incoming and outgoing mobility of teachers and students depends on the allocated funding in project period of each programme. This factor is considered when the goal, tasks and results to be achieved of the potential mobility are evaluated.

The LU PSK website www.psk.lu.lv (Only Latvian) provides information on the application process, as well as application forms for both target audiences. Within the framework of the project quality principles, information is updated by sending e-mails to the partners. Visual materials about the college are available in the International Departments of the partner universities. In the study years

2019/2020 and 2020/2021, exchange of information in the digital environment is topical. Participation in an international online conference also ensures the formation of new partnerships for future mobility.

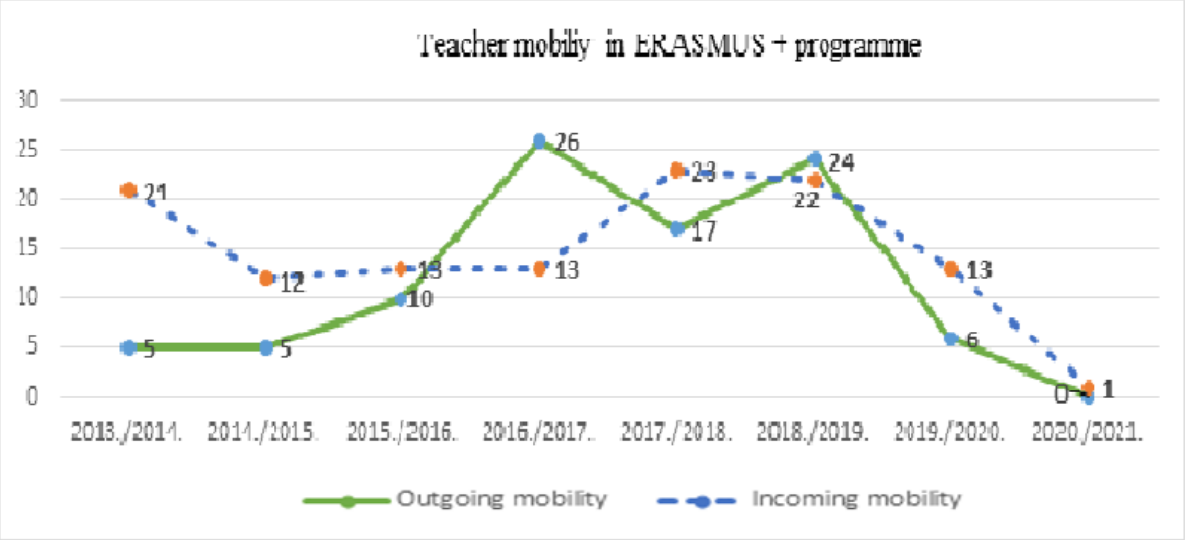


Image 2.5. **Incoming and outgoing mobility of the teaching staff of the study field**

Evaluating and comparing data on of incoming and outgoing ERASMUS + teacher mobility, it is obvious there has been more incoming mobility (*image 2.5.)*. The curve is stable. Foreign lecturers are motivated to participate in teaching and exchange of experiences in the LU PSK, its co-operation institutions. During the study year 2013./2014. a large number of incoming mobilities is related to the process of switching cooperation agreements European Union Lifelong Learning Program ERASMUS + programs for the 2014 – 2020 period. In the academic year 2020/2021, virtual mobility of incoming guest lecturers was implemented, with lectures for college students conducted remotely.

Dynamics of outgoing teacher mobility is related to available funding for implementation of this activity. Teacher mobility during the reporting period was supported not only by the ERASMUS + programme, but also by the college in contributing its own co-financing and participation in projects of NODRPLUS programme.

Each mobility is evaluated positively, because the goal is improvement of the study programme or study course with new knowledge and skills. During the study year 2020/2021, virtual mobility was planned, which was implemented by a college assistant professor. It will be considered completed once the lectures have been given.

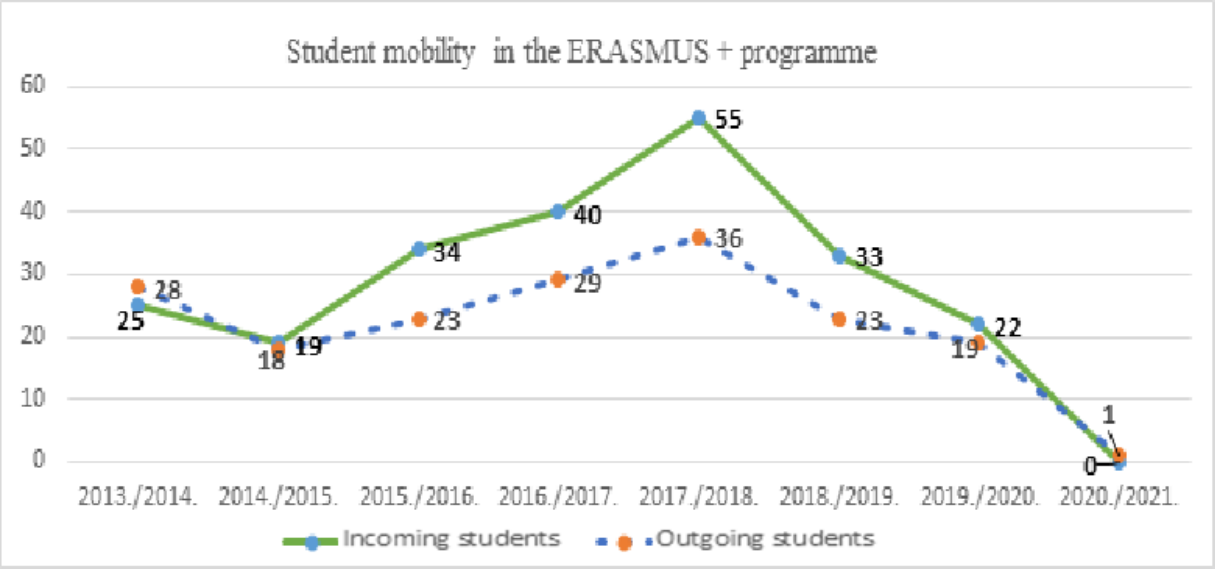


Image 2.6. **Incoming and outgoing student mobility of the study field**

The incoming and outgoing ERASMUS + mobility of students within the *Healthcare* study field in dynamics is developing in a similar direction *(Image 2.6.)*. The number of incoming mobilities is higher than outgoing mobilities, which are related to the trust of partner schools in organizing and managing mobilities, attractive and diverse internships, providing support in the field of accommodation by offering services of a college service hotel. It should be noted that every year there are students who return to continue their professional development.

These indicators are influenced by several factors - number of applications, number of approved applications, amount of funding, student's motivation and courage, approval / rejection of the partner school. Currently, on average, 4% of the total number of LU PSK students participated in mobility. It is planned to increase this percentage in the next Charter period. In study year 2020./2021 in *Healthcare* study field a recent graduate internship is being implemented when a student continues his / her education process within the ERASMUS + program in Italy. 2016/2017 academic year was the first,
when the college implemented mobility for a person with special needs, together with an attendant. One of the basic principles of the Erasmus University Charter is the promotion of non-discrimination and inclusion in society, therefore it is implemented at the P. Stradiņš Medical College of the University of Latvia. Realization of the internationalization plan provides ample opportunities for teachers and students to get involved in international projects to ensure their professional and personal growth.

Difficulties P. Stradiņš Medical College of the University of Latvia has to face to motivate teachers to participate in mobility, depend on the type of mobility. In cases of teaching, lecturers are not always convinced of their comprehensive knowledge of foreign languages and ability to conduct a course of lectures, participate in discussions and substantiate their position. At the moment not everyone is fluent in professional English or German.

If the mobility foresees gaining of experience or training, the aspect of difficulty is the period of mobility. Typically, in this type of mobility, the college foresees 5 to 6 days of activity, which is complicated due to the workload in daily work. Another difficulty are family circumstances. Mobility is agreed on, coordinated and implemented in a timely manner so that the parties involved can prepare for activities.

The motivation and desire of the participants to go abroad must also be taken into account, as not everyone wants to participate in such activities. There are staff who are happy to go on mobilities

repeatedly, to strengthen their existing knowledge and skills, as well as to gain new impressions and discuss current issues with industry professionals.

If faculty mobility is colleagues coming from abroad, the language barrier between the lecturer and the students often creates difficulties. Overall, the activities are positive and inspiring.

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.

Expert recommendations were declared within the framework of study programmes, summary of execution of recommendations is available in annex 14.

In summarizing recommendations of experts main directions of activity can be determined:

1. Improvement of scientific research activities and provision of further education activities for academic staff;
2. Improvement of material and technical base and integration of modern technologies in the study process.

Improvement of scientific research activities and provision of further education activities for the academic staff.

During the reporting period, the motivation of academic staff to obtain scientific degrees in the field has increased. The number of academic staff with a doctoral degree has increased and currently two lecturers are candidates for a scientific degree. Teachers with a doctoral degree are invited to the study programs.

During the reporting period, the English language skills of lecturers have also visibly improved, which is confirmed by the activity in the professional development programs for learning a foreign language at the University of Latvia.

Compared to the previous period, the academic staff has increased its activity in the field of scientific research - participation in conferences, publications, including internationally cited publications.

During the reporting period, the LU PSK has ensured active participation in ESF continuing education projects, involving the teaching staff of the college in the development of curricula and methodological tools and in the implementation of the study process. *(table 2.18.).*

Table 2.18.

Implemented ESF projects in the study direction Health Care in the reporting period

Name and period of activity	Results of the project, teaching staff involved

1.	Sections 1.3.2.3 of the Addendum to the ESF Operational Program "Human Resources and Employment" activities "Further education of the staff of the institutions involved in the process of health care and promotion for sustainable development **A model of good practice in GP practice**	Development of programs, teaching aids, provision of training - 200 medical practitioners. Lecturers - I. Kužniece, J. Raudovs, I. Kozlovska Project period (2014), project coordinator - I. Strode Financing 30755,00 EUR
2.	Agreement No. concluded on October 9, 2018 within the framework of the European Social Fund project No. 9.2.6.0 / 17 / I / 001 "Preparation and implementation of training programs for medical and medical support staff in emergency medical matters". 01-32.1.3.2 / 113 **Electrocardiographic diagnosis of urgent conditions**	Development of programs, teaching aids, provision of training - 100 medical practitioners. Lecturers – A. Viktorovs, I. Orleāne Project period (2018 - 2019), project coordinator – I. Strode Financing 19300,00 EUR
3.	Agreement No. 9.26 concluded on November 6, 2018 within the framework of the European Social Fund project No. 9.2.6.0 / 17 / I / 001 "Improvement of qualification of medical and medical support staff" 01-32.1.3.2 / 161 **Principles of ergonomics in the care of oncology patients**	Development of programmes, teaching aids, provision of training - 30 medical practitioners. Lecturers - I. Laže, D. Bindemanis Project period (2018 - 2019), project coordinator – I. Dupure Financing 19300,00 EUR
4.	Agreement Nr.9.2.6.0/17/I/001 concluded on August 20, 2019 within the framework of the European Social Fund project No. 9.2.6.0 / 17 / I / 001 "Improvement of qualification of medical and medical support staff" **Principles of ergonomics in the care of oncology patients**	Provision of training - 200 medical practitioners. Lecturer - I. Laže, D. Bindemanis Project period (2019 - 2021), project coordinator – I. Dupure Financing 41500,00 EUR
5.	Agreement Nr. 01-32.2.3./26 concluded on February 26, 2020 within the framework of the European Social Fund project No. 9.2.6.0 / 17 / I / 001 "Improvement of Qualification of Medical and Medical Support Staff" **Infection prevention and control measures in medical institutions**	Development of programmes, study material, provision of training - 240 medical practitioners Lecturers – A. Krūmiņa, J. Urbēna Projekta periods (2020 - 2022), project coordinator – I. Dupure Financing 34600,00 EUR
6.	Agreement No. 01-32.1.3.2/121 concluded on August 1, 2019 within the framework of the European Social Fund project No. 9.2.6.0 / 17 / I / 001 "Improvement of qualification of medical and medical support staff" **Vaccination issues in doctor's practice**	Development of programmes, study material, provision of training - 400 medical practitioners. Lecturers – A. Krūmiņa, I. Končus Project period (2019 - 2021), project coordinator – I. Dupure Financing 28800,00 EUR
7.	Agreement Nr. 01-32.1.3.2/114 concluded on October 9, 2019 within the framework of the European Social Fund project No. 9.2.6.0 / 17 / I / 001 "Preparation and Implementation of Training Programs for Medical and Medical Support Personnel in Emergency Medical Assistance Issues" **Basics of transfusiology**	Development of programmes, study material, provision of training - 60 medical practitioners. Lecturers – I. Skrinde, I. Papsujeviča Project period (2018 - 2019), project coordinators – I. Strode Financing 10300,00 EUR
8.	Agreement Nr. 01-32.1.3.2/115 concluded on October 9, 2018 within the framework of the European Social Fund project No. 9.2.6.0 / 17 / I / 001 "Preparation and Implementation of Training Programs for Medical and Medical Support Personnel in Emergency Medical Assistance Issues" **Basics of transfusiology for oncology patients**	Development of programmes, study material, provision of training - 65 medical practitioners. Lecturers – I. Skrinde, I. Papsujeviča Project period (2018 - 2019), project coordinator– I. Dupure Financing 15850,00 EUR
9.	Agreement Nr. 01-32.1.3.2/84concluded on September 11, 2018 within the framework of the European Social Fund project No. 9.2.6.0 / 17 / I / 001 "Improvement of Qualification of Medical and Medical Support Staff" **Extended cardiovascular resuscitation in adults: a hospital phase (Advanced Cardiovascular Life Support)**	Development of programmes, study material, provision of training – 180 medical practitioners. Lecturers – I. Bobrovs, M. Zute, D. Sergejevs Project period (2018 - 2019), project coordinator – I. Dupure Financing 43060,00 EUR
10.	Agreement Nr. 01-32.1.3.2/186 concluded on July 10, 2020 within the framework of the European Social Fund project No. 9.2.6.0 / 17 / I / 001 "Improvement of qualification of medical and medical support staff" **Extended cardiovascular resuscitation in adults: a hospital phase (Advanced Cardiovascular Life Support)**	Provision of training –600 medical practitioners. Lecturers – I. Bobrovs, M. Zute, D. Sergejevs Project period (2020 - 2022), project coordinator – I. Dupure Financing 116400,00 EUR

11.	Agreement Nr. 01-32.1.3.2/83 concluded on September 11, 2018 within the framework of the European Social Fund project No. 9.2.6.0 / 17 / I / 001 “Improvement of Qualification of Medical and Medical Support Staff” **Extended cardiovascular resuscitation in adults: a hospital phase (Advanced Cardiovascular Life Support)**	Development of programmes, study material, provision of training. - 205 medical practitioners Lecturers – I. Bobrovs, I. Blumberga, I. Rogovska Project period (2018 - 2019), project coordinator – I. Dupure Financing 48100,00 EUR
12.	Agreement Nr. 01-32.1.3.2/185 concluded on July 10, 2020 within the framework of the European Social Fund project No. 9.2.6.0 / 17 / I / 001 “Improvement of qualification of medical and medical support staff” **Extended cardiovascular resuscitation in adults: a hospital phase (Advanced Cardiovascular Life Support)**	Provision of training - 400 medical practitioners. Lecturers – I. Bobrovs, I. Blumberga. Project period (2020 - 2022), project coordinator – I. Dupure Financing 77600,00 EUR
13.	Agreement Nr. 01-32.1.3.2/85 concluded on September 11, 2018 within the framework of the European Social Fund project No. 9.2.6.0 / 17 / I / 001 “Improvement of Qualification of Medical and Medical Support Staff” **Extended cardiovascular resuscitation in adults: a hospital phase (Advanced Cardiovascular Life Support)**	Development of programmes, study material, provision of training -180 medical practitioners. Lecturers – I. Bobrovs, D. Sergejevs, M. Zute Project period (2018 - 2019), project coordinator – I. Dupure Financing 41000,00 EUR
14.	Agreement Nr. 01-32.1.3.2/184 concluded on July 7, 2020 within the framework of the European Social Fund project No. 9.2.6.0 / 17 / I / 001 “Improvement of qualification of medical and medical support staff” **Extended cardiovascular resuscitation in adults: a hospital phase (Advanced Cardiovascular Life Support)**	Provision of training - 672 medical practitioners. Lecturers – I. Bobrovs, I. Blumberga, M. Zute Project period (2020 - 2022), project coordinator – I. Dupure Financing 131040,00 EUR
15.	Agreement Nr. 01-32.1.3.2/120 concluded on August 1, 2019 within the framework of the European Social Fund project No. 9.2.6.0 / 17 / I / 001 “Improvement of qualification of medical and medical support staff” **Promotion of physical activity in various diseases**	Development of programmes, study material, provision of training - 200 medical practitioners. Lecturers - I. Aršauska, D. Bindemanis Project period (2019 - 2020), project coordinator – I. Strode Financing 17400,00 EUR
16.	Agreement Nr.01-32.1.3.2/43concluded on June 27, 2018 within the framework of the European Social Fund project No. 9.2.6.0 / 17 / I / 001 “Improvement of Qualification of Medical and Medical Support Staff” **Professional development program - Functional diagnostic method in nursing practice.**	Development of programmes, study material, provision of training - 30 medical practitioners. Lecturers - I. Orleāne, D. Matīsa, I. Kurcalte, K. Vanaga, I. Šitikova Project period (2018 - 2019), project coordinator – I. Dupure Financing 65000,00 EUR
17.	Agreement Nr.01-32.1.3.2/183 concluded on July 9, 2020 within the framework of the European Social Fund project No. 9.2.6.0 / 17 / I / 001 “Improvement of qualification of medical and medical support staff” **Professional development program - Functional diagnostic method in nursing practice.**	Provision of training -30 medical practitioners. Lecturers - I. Orleāne, D. Matīsa, I. Kurcalte, K. Vanaga, I. Šitikova Project period (2020 - 2021), project coordinator – I. Dupure Financing 72000,00 EUR
18.	Agreement Nr. 01-32.1.3.2/165 concluded on June 18, 2020 within the framework of the European Social Fund project No. 9.2.6.0 / 17 / I / 001 “Improvement of qualification of medical and medical support staff” **Consequences of inappropriate use of antibacterial agents**	Provision of training - 288 medical practitioners. Lecturers -A. Krūmiņa Project period (2020 - 2022), project coordinator – I.Dupure Financing 32256,00 EUR

Improvement of material and technical base and integration of modern technologies in the study process

Based on the recommendations, financial resources are provided every year for the renewal, improvement and modernization of the material and technical base. The material and technical base of the college is improved every year, not only on the basis of expert recommendations, but also on self-initiated improvements and participation in various projects. Two infrastructure projects are being implemented for the modernization of the study environment:

1. ERAF project Nr. 8.1.1.0/17/I/010 “Modernization of the infrastructure and concentration of resources of the STEM study fields of the University of Latvia” Aim - to modernize the infrastructure of the study program Medicine, Nursing and Biomedical Laboratory Assistant. Granted financing - 313000 EUR (including ERAF financing 266 050 EUR (85%) and state budget financing 45 950 EUR (15%)). Achieved result: emergency medical equipment was

provided, an intensive care simulation chamber was set up, equipment for the biomedical laboratory study program was provided - diagnostic equipment.

2. On 15.02.2019, University of Latvia and LU PSK concluded an agreement on implementation of a joint project on increasing the energy efficiency of the building at Vidus prospekts 36, K-1 in Jūrmala, Increasing the energy efficiency and construction of the building extension in the building at Vidus prospekts 38, Jūrmala. The agreement stipulates that the University of Latvia PSK covers part of the construction of the building extension from its financial resources, while the part of the University of Latvia project on increasing the energy efficiency of buildings is implemented within ERDF projects (project No. 4.2.1.2/18/I/009 k-1, Jūrmala "and project No. 4.2.1.2/18/I/010" Increasing energy efficiency in a building at Vidus prospekts 38, Jūrmala "). Aim - construction of a new extension to expand the LU PSK premises and increase the energy efficiency of buildings. The total amount of the project is 1,132,163 EUR, of which LU covers approximately 480,576 EUR (ERAF funding in the amount of 407171.25 EUR), but LU PSK approximately 651,587 EUR. Completion of the project is planned for the first half of 2021.
3. During the reporting period, a Radiology simulation class has been set up, which ensures high-quality organization of the study process in the Radiographer study programme.

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, study programme Medical Massage was licensed. The Medical Massage study programme is licensed by the decision No. 27 of the meeting of the Study Programme Licensing Commission of July 23, 2014. Licence Nr. 041016-10.

Recommendation of the licensing expert: to ensure fulfillment of uniform criteria both in the college and the branch in the implementation of the study program and to improve the material and technical base. The administration of LU PSK has ensured the unity of the study programme implementation, ensuring a large percentage of unified teaching staff involvement in both the college and the branch. Implementation of the study programme in the branch was started academic year in 2018/2019. A massage room has been set up in the branch, which is equipped with the necessary equipment for acquiring professional competencies.

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)	ANNEX_1_Implementation_Of_Study_Programs_In_Rezekne_Branch.pdf	1_P_ Informācija_Par_Studiju_Virziena_Īstenošanu_Rēzeknes_Filiālē.pdf
List of the governing regulatory enactments and regulations of the higher education institution/ college	ANNEX_2_List_Of_Internal_Regulatory_Enactment_Documents.pdf	2_P_LU_PSK_INA_Saraksts.pdf
The management structure of the higher education institution/ college	ANNEX_3_Management_Structure_Of_P. Stradins_Medical_College_Of_The_University_Of_Latvia.pdf	3_P_LU_PSK_Pārvaldības_Struktūra.pdf
II - Description of the Study Field - 2.1. Management of the Study Field		
Plan for the development of the study field (if applicable)	ANNEX_4_Development_Plan_Of_The_Study_Field.pdf	4_P_Studiju_Virziena_Attīstības_Plāns.pdf
The management structure of the study field	ANNEX_5_Management_Structure_Healtcare_Study_Field.pdf	5_P_Studiju_Virziena_Pārvaldības_Struktūra.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.	ANNEX_6_Documents_Certifying_That_The_College_Will_Provide_Students_With_Opportunities_To_Continue_Their_Education.pdf	6_P_Dokumenti_Iespējas_Turpināt_Izglītības _Ieguvi_Ja_Studiju_Programma_Pārtraukta.pdf
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.	ANNEX_7_Document_Certifying_That_College_Students_Are_Guaranteed_Compensation_For_Losses_In_Case_A_Study_Programme_Termination.pdf	7_P_Dokumenti_Apliecina_Studējošajiem_Garantē_Zaudējumu_Kompensāciju_Programmas_Pārtraukšanas_Gadījumā.pdf
Standard sample of study agreement	ANNEX_8_Sample_Of_The_Study_Agreement_On_Bouth_Implementation_Places.pdf	8_P_Studiju_Līguma_Paraugs_Pamatīstenošanas_Vietā_Filiālē.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	ANNEX_9_Analysis_Evaluation_Of_The_Results_Of_The_Surveys_Of_Students_Graduates_Employers.pdf	9_P_Studiju_Programmu_Studējošo_Absolventu_Darba_Devēju_Aptauju_Rezultātu_Analīze_Novērtējums.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	ANNEX_10_Basic_Information_About_The_Teaching_Staff.pdf	10_P_Informācija_Studiju_Virziena_Mācībspēki.pdf
Biographies of the teaching staff members (Curriculum Vitae in Europass format)	ANNEX_11_Teaching_Staff_Biographies_CV.pdf	11_P_Mācībspēku_Biogrāfijas_(CV).pdf
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.	ANNEX_12_ Statement_Signed_By_The_Director_Of_The_College_That_Knowledge....edoc	12_P_Koledžas_Direktora_Apliecinājums_Par_Mācībspēku_Valsts_Valodas_Zinā....edoc
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)		
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.	ANNEX_13_Quantitative_Data_Summary_For_Study_Related_Scientific_Activities.pdf	13_P_Kvantitatīvo_Datu_Apkopojums_Studiju_Virzienam_Atbilstošām_Zinātniskām_Aktivitātēm.pdf
List of the publications, patents, and artistic creations of the teaching staff over the reporting period.	ANNEX_14_List_Of_Publications_Patents_Artistic_Creativity_Projects_Of_Teaching_Staff_During_The_Reporting_Period.pdf	14_P_Mācībspēku_Zinātniskā_Pētniecība_Mākslinieciskā_Jaunrade.pdf
II - Description of the Study Field - 2.5. Cooperation and Internationalisation		
List of cooperation agreements, including the agreements for providing internship	ANNEX_15_List_Of_Collaboration_Agreements.pdf	15_P_Sadarbības_Līgumu_Saraksts.pdf
Statistical data on the teaching staff and the students from abroad	ANNEX_16_Statistics_On_Foreign_Students_And_Teachers.pdf	16_P_Statistika_Ārvalstu_Studējošajie_Mācībspēki.pdf
Statistical data on the incoming and outgoing mobility of students (by specifying the study programmes)	ANNEX_17_Statistics_Student_Outgoing_Incoming_Mobility_In_Study_Programs.pdf	17_P_Statistika_Studējošo_Izejošo_Ienākošo_Mobilitāti_Studiju_Programmās.pdf
Statistical data on the incoming and outgoing mobility of the teaching staff	ANNEX_18_Teaching_Staff_Mobility.pdf	18_P_Mācībspēku_Mobilitāte.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.	ANNEX_19_Report_On_Implementation_Of_Recommendations.pdf	19_P_Rekomendāciju_Izpildes_Pārskats.pdf
An application for the evaluation of the study field signed with a secure electronic signature	ANNEX_20_ Signed_Application_For_The_Evaluation_Of_The_Study_Direction.edoc	20_Pielikums_Prakstīts_Iesniegums_Studiju_Virziena_Novērtēšanai.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		31_P_Studiju_Programmas_Estētiskā_Kosmetoloģija_Atbilstība_Valsts_Izglītības_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)	ANNEX_56_Compliance_Of_Professional_Qualification_Attained_In_Biomedical_Laboratory_Technician_Study_Programme_With_Professional_Standard.pdf	40_P_Studiju_Programmas_Ārstnieciskā_Masāža_Kvalifikācijas_Atbilstība_Profesijas_Standartam.pdf
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)	Compliance_Radiographer_Study_Programme_With_Industry-specific_Regulations.pdf	Studiju_Programmas_Estētiskā_Kosmetoloģija_Atbilstība_Nozares_Specifiskajam_Normatīvajam_Regulējumam.pdf
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)		

Other annexes

Name of document	Document
Assessment_Of_Teaching_Staff_Growth_And_Professional_Development.pdf	Assessment_Of_Teaching_Staff_Growth_And_Professional_Development.pdf
Mācībspēku_Izaugsmes_Kvalifikācijas_Paaugstināšanas_Novērtējums.pdf	Mācībspēku_Izaugsmes_Kvalifikācijas_Paaugstināšanas_Novērtējums.pdf
ANNEX_8A_Sample_Of_The_Study_Agreement_Part_Time_Studies.pdf	ANNEX_8A_Sample_Of_The_Study_Agreement_Part_Time_Studies.pdf
8A_P_Studiju_Līguma_Paraugs_Nepilna_Laika_Programmās.pdf	8A_P_Studiju_Līguma_Paraugs_Nepilna_Laika_Programmās.pdf

Biomedical laboratory technician (41721)

Study field	*Health Care*
ProcedureStudyProgram.Name	*Biomedical laboratory technician*
Education classification code	*41721*
Type of the study programme	*First level professional higher education study programme*
Name of the study programme director	*Rūta*
Surname of the study programme director	*Melbārde-Vāvere*
E-mail of the study programme director	*Ruta.Melbarde.Vavere@lupsk.edu.lv*
Title of the study programme director	*Mg. biol., Mg. sc. sal.*
Phone of the study programme director	*+371 28292580*
Goal of the study programme	*The aim of the study programme is to prepare highly qualified, contemporarily educated, competent and competitive biomedical laboratory technicians.*
Tasks of the study programme	*1. To ensure compliance of practical skills, abilities, theoretical knowledge and professional attitude with the professional standard of a biomedical laboratory technician, labour market requirements and international practices;* *2. To ensure the acquisition of students' professional knowledge and skills in laboratory diagnostics;* *3. To ensure the acquisition of practical skills in the pre-clinical and clinical practice bases of the college;* *4. To develop students' research analysis abilities and research skills, creative and social activities;* *5. To ensure the ability to implement professional activities in a multicultural environment and to form interdisciplinary cooperation in the health care team, observing the requirements of personal data protection;* *6. To develop communication and team-work skills;* *7. To promote responsibility of the future specialist for the maintenance and increase of his / her professional qualification, continuously improving his / her knowledge and skills, as well as promoting the development of his / her profession.*

Results of the study programme	*Knowledge:* *1. Explains the importance of pre-analytical, analytical and post-analytical process in performing laboratory analyzes;* *2. Understands the possibilities of laboratory diagnostics for the assessment of various conditions of the organism and the environment and evaluates the examination indicators at the norm and various pathologies;* *3. Understands the principles of management, record keeping, ethics, communication, communication and research methodology in the professional activity of a biomedical laboratory technician.* *Skills:* *4. Carries out education on the correct collection and transportation of test materials to the laboratory, participates in the collection of test material and assesses the conformity of the test material to the laboratory test;* *5. Performs laboratory testing of the investigated material and process the obtained results, evaluates their accuracy and reliability, observes the principles of internal quality control;* *6. Applies the technologies and information technologies used in the laboratory for the acquisition, processing and analysis of information, observing the principles of personal data protection and confidentiality;* *7. Plans and organizes his / her work and workplace in order to accurately and qualitatively perform the tasks of the biomedical laboratory technician profession, working independently and in a team.* *Competences:* *8. Professionally uses modern laboratory applications, equipment, hardware, electronic means of communication for high-quality and independent performance of professional duties, performs work planning, organization and evaluation of results in laboratories of various profiles, observing personal and environmental protection requirements;* *9. Applies the acquired knowledge and work in medical institutions, veterinary medicine, environmental and biological sciences, diagnostics and research laboratories, where is able to train and organize training for employees and students;* *10. Takes the initiative and responsibility for the results of one's professional activity, involvement in scientific activity, to improve professional knowledge and skills in the process of further education and maintains one's professional competence.*
Final examination upon the completion of the study programme	*Qualification paper and an integrated examination*

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)	*General or vocational secondary education*
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	*Biomedical laboratory technician*

Places of implementation

Place name	City	Address
P.Stradins Medical College of the University of Latvia	JŪRMALA	VIDUS PROSPEKTS 38, JŪRMALA, LV-2010

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.

Since the previous accreditation of the study field, the aim of the study programme and the study results to be achieved by the study programme have been improved, precisely defining the acquired knowledge, skills and competencies in accordance with the updated professional standard. At the end of the study programme, a part of the final examination has been changed, replacing the test with an integrated examination in accordance with the new competences approach.

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 first level professional higher education Biomedical laboratory technician study programme has been established in accordance with the Law on Higher Education Institutions, Cabinet of Ministers Regulation No. 141 of March 20, 2001, Regulations on the State First Level Professional Higher Education Standard, the Classification of Professions of the Republic of Latvia and LU PSK internal regulatory enactments. The rules, goals and planned results of the admission of the Biomedical Laboratory Technician study programme have been developed and defined in compliance with the principles of the Latvian Qualifications Framework (LQF) and the European Qualifications Framework (EQF). As a result, providing a set of knowledge, skills and competencies that allow to perform qualified laboratory diagnostics in accordance with the professional standard, and opportunity for further studies in bachelor's and second-level professional higher education study programmes, in accordance with the Bologna Declaration, in Latvia and other European countries.

According to the education classification code of the Republic of Latvia, the code of a Biomedical laboratory technician is 41721, where the first two digits correspond to the second qualification level - the first level professional higher education, to be implemented after obtaining general or professional secondary education. Duration of full-time studies is two years. The other three digits of the code identify the corresponding education thematic group (health and social welfare), the education thematic area (health) and the curriculum group (treatment).

The study program corresponds to the level of 5 Latvian Qualifications Framework, which determines the relevant knowledge, skills and competencies.

Graduates of the Biomedical Laboratory Technician study programme obtain a professional

qualification - biomedical laboratory technician and medical practitioner status.

The parameters of the study program are interrelated and correspond to the professional qualification to be obtained.

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

One of the tasks of healthcare is timely receipt of medical services. Biomedical laboratory technicians perform laboratory diagnostics of the materials under investigation and, working in an interdisciplinary team with other professions involved in the health system, help to provide quality health services and diagnostic opportunities for diseases. The Covid-19 pandemic has only demonstrated the role of biomedical laboratory technicians in the healthcare system. Laboratory tests are performed on almost everyone, the population is performed at least once a year, and biomedical laboratory technicians are the basic staff involved in performing laboratory tests.

The Biomedical Laboratory Technician study programme is the only programme of this type in Latvia. The number of graduates has been very variable during the reporting period, but it is still mainly related to a very specific industry and study load. After graduation, 70% -80% of graduates work in the profession. On average, 60% of graduates start employment immediately after graduation, the rest start employment on average within 6 to 12 months after graduation. The main jobs of biomedical laboratory technicians are public and private sector laboratories.

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.

Table 3.1.

Changes in the number of students

	Number of students of the "Biomedical laboratory technician" study programme	Number of graduates of the "Biomedical laboratory technician" study programme	Number of dropouts	
			Year 1	Year 2
2013/2014	44	15	7	-
2014/2015	47	20	7	-
2015/2016	44	15	5	1
2016/2017	41	19	7	2
2017/2018	38	11	17	2
2018/2019	43	6	8	2
2019/2020	68	24	17	-
2020/2021	58	-	10	-

Analyzing statistical data on students in the *Biomedical laboratory technician* study programme in the period from the 2013/2014 academic year until study year 2020/2021 it can be concluded, that the number of students is variable. The number of students has increased in recent years, which can be attributed to the increasing recognition of the profession and demand among applicants.

Analyzing the data on student dropout, it can be seen that the highest dropout is in the first year of studies. This can be attributed to the fact that the profession is very specific and the study load is high. The dropout rate of second year students is low. The most common reasons for dropping out of studies are personal reasons, non-compliance of the profession with individual goals and difficulties in combining studies with work.

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 information included in the study courses is interrelated with the aims of the study courses and the results to be achieved, which are related to the aim of the study program and the results to be achieved.

Table 3.2.

Structure of the *Biomedical laboratory technician* study programme

Number	Study courses	Type of study courses	Study programme **80 CP** (120 ECTS)
1.	General education study courses with the included 6 CP (9 ECTS) module for development of business professional competencies	A	**20 CP** (30 ECTS)
2.	Branch specific study courses		**36 CP** (54 ECTS)
2.1.	Compulsory study courses	A	*12 CP*
2.2.	Compulsory choice courses – vocational courses	B	*34 CP*

2.3	Free choice	C	*2 CP*
4.	Practice	A	**16 CP** (24 ECTS)
5.	Qualification work	A	**8 CP** (12 ECTS)

The interconnection of the study courses and the aims of the study programme can be seen in the mapping of the study programme *(see annex 57).* The results to be achieved in the study programme are harmonized with the professional standard of a biomedical laboratory technician (*see annex 56*).

The study course is updated regularly and in accordance with the LU PSK Study Course Description Development Procedure. At the end of the study year, study courses are updated in accordance with the requirements of the industry, science and the labor market. Industry news is obtained in cooperation with employers and the Latvian Laboratory Association. The evaluation of the questionnaires of students and graduates of the programme is additionally taken into account in order to improve the content and quality of study courses.

For example, in accordance with the requirements of regulatory documents, the study courses included Environmental and Civil protection. The requirements of the industry facilitated the inclusion of Molecular biology in the study content. The content of the study courses, for example in Methods of clinical testing I and II, is updated in accordance with the updated professional standard.

Taking into account the results of surveys of students, graduates and employers, changes are made not only in the content of studies, but also in the distribution of study courses by semesters. For example, the module of entrepreneurship study courses was divided evenly from the first to the third semester, allowing the transfer of infectious diseases in the first semester, as well as study courses in Hematology and coagulation, Biochemistry and cytology, courses - Methods of hematology and citology testing I and II and study courses Methods of biochemical and coagulogy testing.

Teaching staff involved in the implementation of the study programme evaluates not only the content of study courses, but also the content of independent work and evaluation methods in order to prepare highly qualified biomedical laboratory technicians in accordance with the actualities of the field, science and labour market requirements.

Compliance with the requirements of science is ensured by current issues in the development of laboratory diagnostic methods and the participation of lecturers of the study programme in scientific conferences and preparation of reports on research activities. With the development of a qualification paper, the students of the programme engage in scientific activities. Thus, it is possible for students to combine scientific activities under the guidance of a lecturer with the completion of a final examination.

During the studies, students acquire the necessary knowledge and skills in accordance with the requirements defined in the professional standard.

Cooperation with employers is very important to assess trends in the need for Biomedical laboratory technician. Employers inform about vacancies, as well as in discussions with employers, information about the need for future biomedical laboratory assistants, which is related to the replacement of laboratory staff due to retirement.

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 consists of theoretical study courses, practical classes - pre-clinical in classrooms and laboratories in the college, and practice in laboratories of health care institutions. The study programme is concluded by a qualification exam (integrated exam and defense of the developed qualification paper).

The study courses foreseen in the Medical Massage study program are implemented in accordance with the descriptions of the study courses, in which the course evaluation system is determined. LU PSK
Procedure for examinations of study courses is created in accordance with Cabinet of Ministers Regulation No. 141 of March 20, 2001 *On the basic principles and procedures for the evaluation of higher education*.
The student's achievements are assessed according to the principle of openness of assessment, the principle of obligatory assessment, the principle of summing up positive achievements, the principle of diversity of types of tests used in assessment and the principle of conformity of assessment..

Examinations in study courses can be organized in oral, written, practical or combined form. The evaluation system can be divided into two parts: the qualitative indicator is an evaluation in a 10-point system (exam or test), the quantitative indicator is the number of credit points in the study course.

The main forms of study in the programme are lectures, seminars, practical work, group work, students' independent work. Within the framework of independent work, student summarizes and analyzes sources of various references, which are discussed in seminars and practical classes, thus getting to know in more detail diagnostic methods and their significance in laboratories of various fields. The choice of teaching methods is determined by the aims, tasks and content of study courses. To ensure the acquisition of professional knowledge and the ability to apply this knowledge in practice, special emphasis is placed on the unity of theory and practice in the study process. Compared to the previous accreditation period, the number of contact hours has been increased, which allows the student to acquire more theoretical knowledge in person and to improve practical skills in pre-clinic and clinic laboratories.

To promote the student-centered education approach, the practical implementation of the

programme uses such interactive teaching methods that develop student's skills and qualities: seminars, practical work, group / individual work, discussions, presentations. In the seminars, students analyze, compare and evaluate the independently acquired subject matter, as well as give lectures on the prepared topic. The seminars test students' understanding of the topic, develop the ability to argue their point of view, as well as develop presentation skills. The group work method helps students to develop team-work skills and cooperation skills that are relevant in the labor market. Development of collaborative skills is especially important in the professional activity of a biomedical laboratory technician, as these specialists will work in a multidisciplinary team. The study acquisition methods, which are based on the interaction of the lecturer - student and student - student, play an important role, therefore discussions, situation analysis, role plays, group project are used in the acquisition of the educational programme. With the help of problem situation method, students develop an understanding of real life and work situations. In general, the implementation of study process takes into account the different needs of students, developing and adapting teaching methods. Students' needs and learning methods are different, therefore visual, oral and practical materials are used in the study process to ensure full-fledged acquisition of the topic. Under the guidance of lecturers, the acquisition of practical skills and knowledge is promoted. With the tasks of students' independent work, in each study course, skills in independent teaching are improved.

All the listed teaching methods promote the achievement of the study course and study program goals. Biomedical laboratory technician must perform diagnostic tests and analyze the obtained results within the scope of their competence, therefore the skills to perform laboratory examinations, which include the need for diagnostic teaching on the part of the lecturer, as well as analysis and action in solving various situations, including various interactive teaching methods. such as group work, seminar work and others.

At the end of the study process, a qualification examination must be taken, the components of which are the presentation of the qualification paper and the integrated theoretical exam.
The development of a qualification paper promotes and develops the student's skills in research and independent work. The student writes the qualification paper independently, under the guidance of a lecturer. The integrated examination as a form of examination in the study programme for biomedical laboratory technicians was introduced in academic year 2015/2016, based on the recommendations of employers, and replaced the existing form of examination - a test. In the integrated examination, students have to perform practical situation tasks and answer theoretical questions. With this form of examination, students are given the opportunity to defend their answers and explain the actions taken, thus giving an opportunity to fully demonstrate theoretical and practical knowledge. The previous test did not provide such opportunities.

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 practice is organized in accordance with the state standard of first level professional higher

education. The internship is regulated by the internship regulations of P. Stradiņš Medical College of the University of Latvia and the tripartite internship agreement between the college, the student and the internship place. The total volume of practice is 16 CP (24 ECTS). The distribution of practice has changed since academic year 2018/2019, when three parts of practice were introduced. Initially, first-year students completed the practice at the end of the second semester, when the internship was 4 CP (6 ECTS). After discussions with internship supervisors and employers, as well as evaluating student dropouts, the first year's internship was divided into two parts to enable students to get to know the profession more quickly, not only in college labs. After the changes, the practice is divided into three parts, in the first semester 2 CP (3 ECTS), in the second semester 2 CP (3 ECTS) and in the fourth semester 12 CP (18 ECTS)

The first practice lasts 2 weeks, which corresponds to 2 CP (3 ECTS), and is organized at the end of the first semester. The aim of the practice is to get acquainted with the operation of the laboratory and strengthen the knowledge acquired in the first semester, as well as to promote the application of the acquired theoretical knowledge in practice and to promote the acquisition of competencies of the profession. The second part of practice lasts 2 weeks, which corresponds to 2 CP (3 ECTS), and is organized at the end of the second semester. In the second practice, the acquired knowledge in application of haematology, cytology and clinical examination methods in practice is strengthened. During practice, the student has an opportunity to identify possible qualification work topics and research directions. The third part of the study programme practice is planned for the fourth semester. The duration of the practice is 12 weeks, which corresponds to 12 CP (18 ECTS). The aim of the practice is to provide students with individual and in-depth acquisition of practical skills of the biomedical laboratory profession, to integrate and apply the acquired theoretical knowledge and to strengthen the skills for research work. At the end of each practice, students prepare a practice report, which includes a practice diary, which is signed by the practice supervisor. Students present their practice in front of a commission. The evaluation of practice takes into account the quality of the practice diary, evaluation of the practice supervisor and the evaluation of the practice presentation. The practice programme has been developed in accordance with the aims and tasks of the study programme, as well as the professional standard of a biomedical laboratory technician *(table 3.3.).*

The head of the study program organizes the student's practice on the part of the college, and cooperates with the direct internship supervisor from the institution providing the internship. This collaboration helps to ensure that students achieve the set internship objectives. The head of the study program makes sure that the student will have the opportunity to achieve the tasks of the study practice instead of the internship. In turn, the practice manager of the institution is the one under whose leadership the student performs the practice tasks. The internship program for a Biomedical laboratory technician, which includes the organization of the internship by the college and the institution, is attached as ANNEX 60.

Table 3.3.

Linking tasks of the study programme practice with the results of the study programme

Results of the study programme **Tasks of study practices**	**1.** Explains the importance of pre-analytical, analytical and post-analytical process in performing laboratory analyses;	**2.** Carries out education on the correct collection and transportation of the investigated materials to the laboratory, participates in the collection of the investigated material and assesses the compliance of the investigated material with the laboratory investigation;	**3.** Performs laboratory testing of the investigated material and processes the obtained results, evaluates their accuracy and reliability, observes the principles of internal quality management control and environmental protection;	**4.** Applies the technologies used in the laboratory and information technologies for obtaining, processing and analyzing information, observing the principles of personal data protection and confidentiality;	**5.** Plans and organizes their work and workplace in order to accurately and qualitatively fulfil the tasks of the biomedical laboratory technician, working independently and in a team.	**6.** Professionally uses modern laboratory applications, equipment, hardware, electronic means of communication for high-quality and independent performance of professional duties, performs work planning, organization and evaluation of results in laboratories of various profiles, observing personal and environmental protection requirements;	**7.** Applies the acquired knowledge and work in medical institutions, veterinary medicine, environmental and biological sciences, diagnostics and research laboratories, where he/she is able to train and organize training for employees and students;
To get acquainted with the place of practice, its goals, tasks and principles of operation.					X		
To be able to evaluate possible dangerous and harmful factors during work, as well as to identify and use collective and individual protective equipment		X	X	X	X	X	
To strengthen knowledge and improve skills in workplace preparation, observing work safety requirements, when starting work, during work and at the end of work	X		X		X	X	X
To be involved in the collection of research material and education on the collection of research material	X	X					
To observe the regulations for storage, transportation and preservation of test materials	X	X			X	X	
To get acquainted with the correct reception of test materials and evaluation of their validity for laboratory tests, as well as the marking and registration of test materials	X	X			X	X	X
To perform laboratory diagnostics of the investigated material and evaluate the obtained results	X		X	X	X	X	
To identify measures to ensure disinfection, sterilization and disposal of used material	X		X		X	X	X
To get acquainted with the types of internal and external quality control			X	X		X	

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 choose the topic of their qualification paper in accordance with the *Procedure for Development, Submission and Presentation of the Qualification Paper Developed* by the LU PSK. The student has an opportunity to offer a topic of his / her choosing based on his / her knowledge and professional skills. If necessary, the student can consult with the teaching staff of the programme about topicality of the theme. Qualification work must be related to professional qualifications, applied and practically applicable in a professional environment. After choosing the topic of the qualification paper, a supervisor of the qualification paper is appointed.

Students in Biomedical laboratory technicians the study programme create a qualification paper in connection with their professional field. Basically, the topics are related to the comparison of different diagnostic methods, laboratory diagnostics under different pathologies and changes in laboratory parameters depending on the changes in the pre-analytical and analytical process. Research uses a variety of data acquisition methods. The research is dominated by experimental methods and analysis of laboratory data. Each year, students present their research topics at local and international conferences.

During the study year 2014/2015, a study took place in which students of the Biomedical Laboratory Technicians study programme participated. Within the framework of the research development, several students developed their qualification papers. For example, titles of some of the developed qualification papers: “Frequency of vancomycin-resistant enterococci isolation in screening inoculations” and “Incidence of extended-spectrum beta-lactamase-producing microorganisms in screening inoculations in a social care center”.

During the study year 2015/2016, students developed several qualification papers, in the development of which experimental inoculations were used, for example, Cooperation with the students of the study program Podology took place in the development of the topic “Determination of microbiological air composition in the podiatry room”. The results of the qualification work "Effectiveness of daily hand disinfectants" were reported at the LU PSK and LU RMK student conference.

During the study year 2016/2017, students presented their works, which were part of the project of docent Alevtīna Leice. The developed works were: “Effect of physical activity on changes in lipid composition for medical college students”, “Effect of stress on changes in blood counts for medical college students during studies” and “Effect of physical activity on changes in glucose for medical college students during studies” students ”. In this study year the work “Effect of smoking on salivary pH” was developed and received excellent evaluation.

Theme “Topicality of vitamin D diagnostics” of academic year 2017/2018, was developed taking into account the public interest in the use of vitamin D. This year, other topics were related to the

influence of various factors on the laboratory diagnostic process, such as “Changes in biochemical parameters during exercise with restricted and unrestricted blood circulation”, “Cortisol fluctuations related to sex, age and removal time” and “Factors influencing sample flow in medical in the laboratory”.

The analysis of the influencing factors on the researched material in the qualification work topics also dominated in 2018/2019, such as “Changes in blood glucose level depending on sample storage time”, “Changes in erythrocyte sink rate results due to preanalytical factors”, as well as theoretical comparative work “Latest and most modern biological markers in coronary heart disease diagnosis in Latvia and in the world”.

During the study year 2019/2020, various types of research works were developed. The theoretical study “Laboratory Diagnostics of Forensic Medicine Examination” was evaluated with an excellent evaluation. The work "Factors influencing DNA quality in the pre-analytical stage" was highly praised. The first results of the qualification work “Determination of iron deficiency in patients with inflammatory bowel diseases” were published in the collection of theses published within the framework of the LU PSK International Scientific Conference “Quality of Health Care and Social Welfare - EDUCATION and PRACTICE” in May 2019. The topic “Qualitative deposit of microorganisms on the surface of mobile phones” was presented at the 78th International Scientific Conference of the University of Latvia.

Table 3.4

Evaluation of qualification works of the *Biomedical Laboratory Technician* study programme

Academic year	Evaluation in points							Number of graduates
	4 almost satisfactory	**5** satisfactory	**6** almost good	**7** good	**8** very good	**9** excellent	**10** with distinction	
2013/2014	1	2	1	3	-	6	2	15
2014/2015	-	-	2	4	9	4	1	20
2015/2016	-	-	1	4	2	5	3	15
2016/2017	-	-	3	1	9	3	3	19
2017/2018	-	-		2	5	4	-	11
2018/2019	-	-	-	-	2	3	1	6
2019/2020	1	1	-	3	8	6	5	24
Number:	**2**	**3**	**7**	**17**	**35**	**31**	**15**	**110**

The topics of the Biomedical Laboratory Technician study programme qualification works fully correspond to the content and requirements of the study programme, as well as the current issues of the modern labor market.

In annual discussions with employers, the current issues of the industry are clarified not only from the professional side but also from the scientific side. Thus, enabling students to adapt the topics of the qualification paper to the current trends in the field. For example, due to the increasing use of molecular diagnostic methods in laboratory diagnostics, the number of qualification papers discussing the use of these methods is also increasing.

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 main source of funding for the Biomedical Laboratory Technician study programme for the study process is the state budget funding.

Lectures for students can be provided in well-equipped auditoriums, 4 laboratories (microbiology, chemical and environmental medicine, haematology and cytology, clinical chemistry), pre-clinical offices (procedure technique room, emergency room and massage room).

Starting 2013/2014 until 2020/2021 the material and technical provision necessary for the implementation of the study programme in laboratories has been significantly supplemented. The study laboratories are supplemented with microscopes for students and lecturers. Lecturers' microscopes are supplemented with digital cameras to facilitate the demonstration of microscopic material to students. This type of technology facilitates the demonstration of the sample and enhances the students' visual perception. In 2020, the technologies required for microscopy were supplemented with 10 Leica DM-500 microscopes, with integrated digitization, tablets and a control platform for learning process management. A hematology analyzer, a biomarker analyzer, a biochemical analyzer for lipid determination and a semi-automatic clinical chemistry analyzer have been purchased to approximate the acquisition of skills in working with analyzers.

Between 2015 and 2019, pre-clinical and treatment rooms were equipped with 55-inch monitors and computers with Internet access to visualize how to manipulate according to industry standards, thus complementing the learning process with learning conditions for cognitive manipulations.

From the spring of 2020, the facilities provided by the Microsoft Office365 platform have been implemented at the University of Latvia. Academic staff and students have access to an interactive environment, in which it is possible to additionally organize the learning process, also using the interactive Microsoft TEAMS platform.

Every year, the computer equipment and software required for the study process is improved and supplemented, to provide students with an opportunity to acquire information technologies. There are 18 workplaces for students and 1 workstation for a lecturer equipped with a multimedia projector. Workplaces for students are arranged so that the lecturer can follow the activities of each student at the same time.

The library provides students with study literature and periodicals in Latvian, English, German and Russian, regularly informs them of novelties. Every year the library fund is supplemented with new teaching materials.

In general, the resources and provision of the study programme correspond to the conditions and results of the implementation of the objectives of the study programme. Regular addition of material and technical base ensures achievement of high-quality planned study results.

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 financial resources of the College consist of three sources: funding of the Ministry of Education and Science of the Republic of Latvia for the implementation of study programmes, income from paid services and other income of the College, projects financed by European Union organizations and other international organizations. In the Biomedical laboratory technician study programme, the main source of funding are the funds of the Ministry of Education and Science of the Republic of Latvia for the implementation of study programmes. The basic costs of a study place in the Biomedical laboratory technician study programme, budget financing per student are 1630.11 EUR. The real costs of the study programme per student are shown (table 3.5.). Funding for full-fledged implementation of the study programme is obtained from the college's income and projects financed by European Union organizations and other international organizations. The minimum number of students to ensure the profitability of the study programme is 15.

Table 3.5.

Cost calculation of the Biomedical laboratory technician study programme

Salary per one study place	Employer's compulsory state social insurance contributions per one study place per year	Cost of business trips and travel per one study place per year	Service costs per study place per year	Costs of materials, energy resources, water and inventory per study place per year	Cost of purchasing books and magazines per student per year	Equipment purchase and modernization costs per study place per year	**Cost per study place**
1431.38	337.66	87.62	525.54	203.69	7.99	74.94	**2668.82**

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.

Qualification of the teaching staff involved in implementation of the *Biomedical laboratory technician* study programme study courses complies with the requirements of regulatory enactments and the strategic goals set by the college. 27 lecturers are involved in implementation of the study programme, 14 of which are academic staff (elected in LU PSK) and 13 invited lecturers. Two lecturers with a doctor's degree in engineering, 1 lecturer with a doctor's degree in pedagogy, 1 lecturer with a doctor's degree in physics, 1 lecturer with a doctor's degree in biology. 20 lecturers with master's degree and 2 lecturers with a bachelor's degree.

The qualifications acquired by the teaching staff play a very important role in enabling students to acquire a wide range of knowledge and versatile skills and to develop professional competencies under the guidance of lecturers. The majority of lecturers are professionals in medical and radiology fields, who specialize in their respective professional field and have worked for a long time, or work in related professions, thus ensuring the quality of the study results to be achieved. In addition, the teaching staff involved in the implementation of the study program has a higher pedagogical education, a master's or doctoral degree in educational science, allowing to ensure the link between practice and science, and the involvement of students in research.

For example, a lecturer in Microbiology and Epidemiology, who is a microbiologist, works not only in college but also in the microbiology laboratory, regularly attends various courses and training events, learning the latest diagnostic methods in microbiology, transferring his new knowledge to students, promoting the latest methods. Such a practice to improve professional knowledge is practiced by all lecturers, attending courses, conferences and other events used by all lecturers to improve both professional and pedagogical knowledge. Making a great contribution to the training of students with the latest trends and knowledge in various fields.

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.

Table 3.6.

Number of teaching staff involved in realization of the study programme

Post	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021
Associate professor	1	1	1	1	1	2	3	4
Lecturers	10	12	13	12	12	11	11	10
Assistants	1	-	-	-	-	-	-	-
Teachers	7	6	5	9	9	9	9	13
Altogether	19	19	19	22	22	22	23	27

During the reporting period, significant changes have been observed in the composition of the teaching staff implementing the study courses in the Biomedical laboratory technician programme.

- The number of elected docents in the academic staff has increased from 1 to 2 starting

academic year 2018/2019 from 2 to 3, starting academic year 2019/2020 and from 3 to 4 starting academic year 2020/2021. Lecturers with a doctor's degree in biology, for example, S. Tūrs, docent with a doctor’s degree in pedagogy, for example M. Saulīte are involved in realization of the programme. These lecturers have the necessary knowledge and skills in research, which allows students to develop research skills within the study course.

- The number of lecturers in the reporting period, on average 10 to 12, starting academic year 2020/2021 has decreased from 11 to 10, due to the fact that 1 lecturer was elected docent.
- One assistant who completed master's studies in academic year 2013/2014 and participated in the implementation of the study programme in study year 2014/2015, was elected a lecturer. The number of elected lecturers has remained on average 13 lecturers during the reporting period, and has remained unchanged during the last two study years - 14 elected lecturers, which form the core of the program implementers and thus promote stability and allow faster implementation of the latest solutions.
- Starting academic year 2016/2017 the number of invited lecturers has significantly increased from 5 to 9, which has remained unchanged until academic year 2020/2021, when the number of invited lecturers has increased from 9 to 13. The percentage of teaching staff involved in the study programme - the academic staff vs the invited lecturers in 2016/2017 is as follows - 59% are academic staff and 41% are guest lecturers, which has remained unchanged until study year 2020/2021, with percentage being 52% to 48%.
- In professional study subjects, it is important to retain lecturers who work in the relevant field and are able to develop the professional skills necessary for students.
- Risks that may affect the quality of the study process are the increase in the average age of teaching staff and lecturers who are already of retirement age. Risks are related, firstly, to the problem of generational change, as young professionals have a heavy workload in health care institutions, and secondly, uncompetitive remuneration. The College needs to find motivating factors for attracting these faculty to ensure the long-term stability of the program.

In realization of the “Biomedical laboratory technicians” study programme basic courses 35 CP (52,5 ECTS) or 55% are implemented by the academic staff of the college and 39 CP (58, 5 ECTS) or 45% by invited lecturers (excluding free choice study courses, qualification work management).

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).

Study courses of the programme are acquired sequentially. Based on this fact, when making additions, in one study course it is necessary to cooperate with the lecturers of the next courses in order to avoid duplication of information. Cooperation in the improvement of the content of study courses is promoted through meetings with the participation of subject lecturers, the head of the study programme and practice supervisors. The meeting takes place at the end of the study year.

Co-operation of teaching staff also takes place in the development of students' qualification papers. The lecturer of the study programme is basically the supervisor and a work consultant can be invited.

The teaching staff of the Department of Medical Technologies cooperates by organizing various conferences both for students and at an interdisciplinary level. Since 2017, an interdisciplinary scientific conference has been organized, in the realization of which study program managers cooperate with industry associations.

Improving the quality of the study programme is a common goal for the teaching staff involved in the study process, therefore mutual cooperation takes place on a daily basis. Ratio of the number of students of the programme vs the teaching staff in study year 2020/2021 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	ANNEX_53_Sample_Of_The_Diploma_To_Be_Issued_In_The_Study_Program_Biomedical_Laboratory_Tehnician.pdf	53_P_Studiju_Programmas_Biomedicīnas_Laborants_Izsniedzamā_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	ANNEX_54_Statistics_On_Students_In_The_Reporting_Period_In_The_Study_Program_Biomedical_Laboratory_Technician.pdf	54_P_Statistika_Par_Studējošajiem_Studiju_Programmā_Biomedicīnas_Laborants.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_55_Compliance_Of_The_Study_Program_Biomedical_Laboratory_Tehnician_With_The_State_Education_Standart.pdf	55_P_Studiju_Programmas_Biomedicīnas_Laborants_Atbilstība_Valsts_Izglītības_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)	ANNEX_56_Compliance_Of_Professional_Qualification_Attained_In_Biomedical_Laboratory_Technician_Study_Programme_With_Professional_Standard.pdf	56_P_Studiju_Programmas_Biomedicīnas_Laborants_Kvalifikācijas_Atbilstība_Profesijas_Standartam.pdf
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)	Compliance_Biomedical_Laboratory_Technician_Study_Programme_With_Industry-specific_Regulations.pdf	Studiju_Programmas_Biomedicīnas_Laborants_Atbilstība_Nozares_Specifiskajam_Normatīvajam_Regulējumam.pdf
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	ANNEX_57_Mapping_Of_Study_Courses_For_Achieving_The_Study_Results_Of_The_Study_Program_Biomedical_Laboratory_Tech.pdf	57_P_Studiju_Programmas_Biomedicīnas_Laborants_Studiju_Kursu_Kartējums.pdf
The curriculum of the study programme (for each type and form of the implementation of the study programme)	ANNEX_58_Study_Plan_Of_Study_Program_Biomedical_Laboratory_Technician.pdf	58_P_Studiju_Programmas_Biomedicīnas_Laborants_Studiju_Plāns.pdf
Descriptions of the study courses/ modules	ANNEX_59_Descriptions_Of_Study_Courses_In_Study_Program_Biomedical_Laboratory_Tehnician.pdf	59_P_Studiju_Programmas_Biomedicīnas_Laborants_Studiju_Kursu_Apraksti.pdf
Description of the organisation of the internship of the students (if applicable)	ANNEX_60_Study_Programs_Biomedical_Laboratory_Tehnician_Student_Practice_Organizations_Description.pdf	60_P_Studiju_Programmas_Biomedicīnas_Laborants_Studējošo_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)		

Esthetic Cosmetology (41722)

Study field	*Health Care*
ProcedureStudyProgram.Name	*Esthetic Cosmetology*
Education classification code	*41722*
Type of the study programme	*First level professional higher education study programme*
Name of the study programme director	*Inguta*
Surname of the study programme director	*Grinberga*
E-mail of the study programme director	*Inguta.Grinberga@lupsk.edu.lv*
Title of the study programme director	*Mg. paed.*
Phone of the study programme director	*+371 28652453*
Goal of the study programme	*To prepare qualified first level professional higher education beauty specialists in cosmetology, ensuring the acquisition of knowledge and skills in the chosen profession, creating a responsible, creative and professionally educated specialist in the beauty industry that meets the requirements of Latvian and European labor market and promotes competitiveness in changing socio-economic conditions.*
Tasks of the study programme	*1. To provide students with an academically and professionally high-quality study process in accordance with the requirements of first level professional higher education state standard and the professional standard of "Beauty Care Specialist in Cosmetology", obtaining the fourth level professional qualification of a beauty specialist in cosmetology;* *2. To develop students' understanding of the basic principles of research, professional ethics and basic social skills in communication in independent and team work;* *3. To know the regulatory enactments and documents regulating professional activities, ensuring the protection of personal data and the principles of information confidentiality;* *4. To motivate students to take care of their further education and professional development in the chosen field of beauty care.*

Results of the study programme	*Knowledge* *1. Understands the management of a beauty salon and the provision of financing, regulatory enactments and documents regulating professional activities, ensuring the protection of personal data and the principles of confidentiality of information;* *2. Understands the anatomical structure and physiological functioning of the human body;* *3. Understands the care of a patient with health disorders;* *4. Knows the methods of decorative, cosmetological and esthetic medicine, the hardware technologies used, including innovative, necessary materials, understanding the issues of work safety and infection control;* *Skills* *5. Plans his/her activities within the limits of his/her professional role and competence, on the basis of regulatory and regulatory documents, observing the principles of personal data protection and information confidentiality;* *6. Assesses the client's health condition, identifying the need for treatment that is beyond the limits of skills and competencies, recommending the client to turn to an appropriate health care specialist;* *7. Performs diagnostics of the skin on the face and body and, in accordance with the limits of his/her professional competence, makes a decision regarding the performance of the necessary esthetic care procedures for the face and body;* *8. Selects and performs decorative and cosmetological procedures, apply hardware-technological devices, materials and cosmetic means, evaluates and document the obtained results;* *9. Selects and performs a wide range of high-risk beauty services, taking into account the maintenance of a safe working environment in connection with infection control;* *10. Educates the client and creates an understanding of health promotion and disease prevention, face and body skin care, application of various cosmetics at home;* *11. Provides emergency medical assistance;* *12. Carries out research activities in the fields related to the field, freely reads special literature in a foreign language on cosmetology, applies modern information technologies;* *Competences* *13. Understands and analyzes the basic principles of a healthy lifestyle and the positive impact of health-promoting factors on improving the quality of life, the relationship between physical, mental and social health in the context of professional activity;* *14. Orients himself to the basics of skin disease diagnostics and, within the limits of his or her competence, performs skin care procedures using the necessary materials and apparatus technologies;* *15. Evaluates and performs a wide range of high-risk beauty services, taking into account the maintenance of a safe working environment in connection with infection control;* *16. Carries out a color test consultation and recommends to the client the appropriate shape and color range of decorative cosmetics;* *17. Assesses and acts appropriately in life-threatening situations and provides emergency medical assistance in the event of an accident;* *18. Organizes and manages the work of a beauty care institution, ensuring the observance of labor protection regulations, performs activities within the limits of its professional role and competence, on the basis of regulatory and regulatory documents, observes the principles of protection of personal data and confidentiality of information;* *19. Analyzes and performs research activities in health care, aesthetic medicine and cosmetology, using modern information technologies.*

Final examination upon the completion of the study programme	*Qualification paper and an integrated examination.*

Study programme forms

Full time studies - 3 years - latvian

Study type and form	*Full time studies*
Duration in full years	*3*
Duration in month	*0*
Language	*latvian*
Amount (CP)	*120*
Admission requirements (in English)	*General or vocational secondary education*
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	*-*
Qualification to be obtained (in english)	*Beauty care specialist (in cosmetology)*

Places of implementation

Place name	City	Address
P.Stradins Medical College of the University of Latvia	JŪRMALA	VIDUS PROSPEKTS 38, JŪRMALA, LV-2010

Part time studies - 3 years, 5 months - latvian

Study type and form	*Part time studies*
Duration in full years	*3*
Duration in month	*5*
Language	*latvian*
Amount (CP)	*120*
Admission requirements (in English)	*General or vocational secondary education*
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	*-*
Qualification to be obtained (in english)	*Beauty care specialist (in cosmetology)*

Places of implementation

Place name	City	Address
P.Stradins Medical College of the University of Latvia	JŪRMALA	VIDUS PROSPEKTS 38, JŪRMALA, LV-2010

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 goal of the Esthetic cosmetology study programme has been expanded based on the changing of social-economic conditions.

The tasks of the study program “Esthetic Cosmetology” have been expanded since the previous accreditation on the basis of professional standards and regulatory enactments and legal requirements related to certain compliance in the labor market in the provision of services, for example, to know the regulatory enactments and documents regulating professional activities, ensuring the protection of personal data and the principles of confidentiality of information.

In cooperation with employers, professional associations and guided by the professional standard, the results of the study program “Esthetic Cosmetology” expanded and clarify certain competencies of this profession, for example, to evaluate and perform a wide range of high-risk beauty services.

During the reporting period, a full-time study program “Esthetic Cosmetology” was implemented for 3 years (6 semesters). Part-time 3 years and 5 months (7 semesters) in the reporting period has not been realized.

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 first level professional higher education Esthetic cosmetology study programme has been established in accordance with the Law on Higher Education Institutions, Cabinet of Ministers Regulation No. 141 of March 20, 2001, Regulations on the State First Level Professional Higher Education Standard, the Classification of Professions of the Republic of Latvia and LU PSK internal regulatory enactments.

According to the Education Classification Code of the Republic of Latvia, the code for Beauty care specialist (in cosmetology) is 41722, where the first two digits correspond to the second qualification level - the first level professional higher education, to be implemented after obtaining general or vocational secondary education. Duration of full-time studies is three years. The other three digits of the code identify the corresponding education thematic group (health and social

welfare), the education thematic area (health care) and the curriculum group (medical services).

The study programme provides students with theoretical knowledge and professional skills in accordance with current trends and innovations in the provision of beauty care services, as well as involvement in health care. The tasks of the study programme are aimed at achieving the defined goals and ensuring the study results. The expected results of the study programme are formulated on the basis of the knowledge, skills and competencies defined in the Latvian qualification framework in accordance with the 4th qualification level and the requirements included in the professional standard.

Upon graduation of the study programme, the student obtains a diploma of first level professional higher education and the qualification of Beauty care specialist in cosmetology and the status of a medical profesional. The awarded qualification envisages the acquisition of the necessary knowledge, skills and competencies provided by the evaluated study programme. For example, the professional standard mentions several tasks - to perform non-invasive esthetic and medical cosmetology care procedures for face, body and / or head care; to perform a wide range of beauty services with a high risk of infection, assessing the compliance of the client's health condition for the performance of the selected procedure, evaluating and documenting the obtained results; to educate the society by promoting health and disease prevention, etc., the knowledge and skills of which are included in the content of the study program and correspond to the title of the study program Aesthetic Cosmetology. The parameters of the study program are interrelated and correspond to the professional qualification to be obtained.

Duration of the study programme, 3 years, is closely related to the skills, professional knowledge and competencies specified in the professional standard. The specified duration of studies allows to achieve the set goal of the study programme and acquires the necessary skills for performing professional activities. The professional knowledge, skills and competencies required for part-time studies could be acquired within 3.5 years.

Admission requirements are set out in the LU PSK Admission Regulations and are based on the requirements of regulatory enactments. An applicant who has successful assessments in a document certifying secondary education, which confirms knowledge of the state language and a foreign language (eg, successfully passing centralized examinations) is able to study in the first level higher professional education programme.

Applicant's preparation at the previous level of education, motivation to obtain professional education and organization of the study process are able to ensure the achievement of study results.

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

With the development and improvement of society, the healthcare sector in cosmetology is also developing. Today, innovative apparatus technologies, more complex procedures for skin care and solving skin problems are entering the field of beauty care. There is a growing need for highly qualified specialists in the cosmetology industry who are able to perform these procedures professionally and skillfully educate clients. The statistics of the LU PSK show that the number of students wishing to study in the study program Esthetic Cosmetology continues to grow and thus provide a social and economic contribution to the labor market.

Nowadays, the number of clients with chronic skin diseases, which mostly result from wrong skin care and insufficient information about skin care before and after various skin problem-solving procedures, is increasing. Cases of skin cancer are statistically significant in Latvia. Beauty specialists (in cosmetology), within the limits of their competence, are able to provide high-quality, professional skin care and educate clients about the health of their skin and its proper care and maintenance. Nowadays, cooperation between dermatologists and beauty specialists in cosmetology, treatment and care of various skin diseases is essential, which promotes the improvement of the client's skin health.

In the College's ERASMUS programme, students have the opportunity to go on practical training in beauty care abroad, such as Spain, Italy, Germany, etc., where students' knowledge and skills are highly valued.

In Latvia, employers, during all seven reporting periods (from 2013 to 2020), acknowledge that the students of the Esthetic Cosmetology study programme are well prepared and educated for the requirements of the labor market.

After studying in college, young beauty specialists in cosmetology (70% - 80%) work in their field (medical institutions, beauty salons, private practices).

During the reporting period (from 2013 to 2020), after studying at the college, 77% of young Beauty care specialist (in cosmetology) work in their field (medical institutions, beauty salons, private practices).

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.

Analyzing statistical data of the Esthetic cosmetology programme for the time period from 2013/2014 until 2020/2021, it can be concluded that the number of students is variable (see table 3.1.). In the period from the study year 2018/2019 until 2020/2021 the total number of students for the academic year has increased significantly, which could be related to the professional assessment of the field and the recognition of the profession in society, as well as the demand for highly qualified specialists in the Latvian and European labour market. The number of matriculated students with previously acquired medical education who join studies at later stages has also increased.

Analyzing the data on student drop-out in the reporting period, there is a tendency that this drop-out occurred in the first study year. Most often, in 88,5% of cases, studies are not continued due to personal reasons, while in 11,5% of cases dropout is related to non-timely fulfillment of various study requirements, and for financial reasons. The Esthetic cosmetology study programme is implemented in the official language, attracting private financing *(see annex 30).* Part-time 3 years and 5 months (7 semesters) in the reporting period has not been realized.

Table 3.1.

Statistical data on students of the *Esthetic cosmetology* study programme of the college

	Number of students in the programme	Number of students matriculated of the programme	Number of graduates of the programme	Number of dropouts of the programme		
				Year 1	Year 2	Year 3
2013/2014	102	38	18	5	2	8
2014/2015	118	46	39	7	-	-
2015/2016	101	33	31	3	-	1
2016/2017	98	35	34	1	2	-
2017/2018	86	33	30	4	1	-
2018/2019	104	52	24	14	1	-
2019/2020	121	60	22	12	5	5
2020/2021	158	78	-	14	1	-

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.

First level professional higher education *Esthetic Cosmetology* study programme was established in accordance with the *Law on Higher Education Institutions*, and Cabinet of Ministers' regulations #141 of March 20, 2001 on the *State First Level Professional Higher Education Standard, Professional Standard*, as well as internal regulatory enactments of LU PSK. The *Medicine* study programme is implemented at the Department of Medicine of LU PSK.

The study programme can be implemented in full-time or part-time studies and its amount with previously acquired secondary (general or secondary professional) education is 120 credit points (hereinafter - CP), which are acquired in full-time studies during 3 years (6 semesters) and part-time studies - during 3.5 years (7 semesters). Students with previously acquired medical education are integrated into the study programme on the basis of the internal normative regulation developed by P. Stradiņš Medical College of the University of Latvia "Procedures for assessment and recognition of competencies acquired outside formal education or professional experience and

study results achieved in previous education" (LU PSK Council, 1.11 .2018., No.5).

Content of study courses is designed in such a way as to ensure successive acquisition of knowledge in optional study courses, by supplementing in-depth understanding of the knowledge acquired in basic study course. *(3.2.tab).*

Table 3.2.

Structure of the *Esthetic cosmetology* study programme

Number.	**Study courses**	**Type of study courses**	**Study programme 120 CP** (180 ECTS)
1.	General education study courses with the included 6 CP (9 ECTS) module for development of business professional competencies	A	**20 CP** (30 ECTS)
2.	Branch specific study courses		**70 CP** (105 ECTS)
2.1.	Compulsory study courses	A	*46 CP*
2.2.	Compulsory choice courses – vocational courses	B	*20 CP*
2.3	Free choice	C	*4 CP*
4.	Practice	A	**20 CP** (30 RCTS)
5.	Qualification work	A	**10 CP** (15 ECTS)

Study courses are reviewed every year, taking into account the results of student surveys, labor market trends and requirements in the field of education.

Based on Article 23 of the Civil Protection and Disaster Management Law of the Republic of Latvia, the educational institution ensures the teaching of a compulsory civil protection course to students in higher education. The minimum requirements regarding the content of the compulsory civil protection course are determined by the Cabinet of Ministers, therefore the Civil Defense study course in amount of 1 CP is included in the study programme.

Information included in study courses is interrelated with the goals and tasks of the study courses, which are subordinated to the goal of the study programme and the result to be achieved - knowledge, skills and competences.

Descriptions of study courses are developed by the lecturer, stated as the author of the course description. Teaching staff cooperates in development of study results, content, description of independent work and evaluation of results to promote achievement of results of the study programme. When preparing the description of the study course and formulating the results to be achieved, the lecturer focuses both on achieving the goal of the course and on ensuring results of the programme.

Director of the study programme checks, whether results of study courses to be achieved comply with study results of the study programme by performing mapping (annex 18), which reflects interrelation of the goals. *(see annex 33).*

The study course is updated regularly, in accordance with the LU PSK *Study Course Description Development Procedure*. Teaching staff involved in realization of the study programme evaluates

not only the content of the study courses, but also the content of independent work and evaluation methods, in order to prepare highly qualified, responsible and independent beauty care specialists in cosmetology. Also, a large proportion of the teaching staff are medical practitioners working in medical and professional field. The lecturers of the study programme and teachers of practical classes have established a cooperation with Latvian and European professionals, as a result of which the experience of the academic staff is improved, which promotes the improvement of the study programme.

In order to promote the professional skills and knowledge aquared by students, based on a survey of students and employers, to find an opportunity to increase the number of practical classes in the program by reducing student hours in general education and industry courses especially important when acquiring professional study courses, such as Esthetic Cosmetology, Mesotherapy, Micropigmentation, Waxing, etc.

Newest trends from the field are obtained in cooperation with employers, professional associations and unions. Compliance with the requirements of science is ensured by the participation of the teaching staff of the study program in scientific conferences and preparation of reports on research activities. With development of a qualification paper, students get involved in scientific research processes.

Surveying employers and analyzing topicality of the labor market, it can be concluded that nowadays there is a demand for specialists who, in addition to specialized knowledge, are also proficient in other important areas related to the profession, such as record keeping and labor protection, business, financial accounting and pedagogy. Employers nowadays also require skills such as the ability to analyze, think critically and debate. Theoretical knowledge study courses included in the study programme - practice in clinical environment and the development of a qualification paper are aimed at developing of these skills.

During studies, students acquire the necessary knowledge and skills in accordance with requirements defined in professional standard. This is also confirmed by students' questionnaire and positive evaluations submitted by the employers, as well as evaluation of graduates and their employment.

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 courses envisaged in the Esthetic Cosmetology study programme are implemented in accordance with the descriptions of study courses, which define the course evaluation system in accordance with Cabinet of Ministers Regulation No. 141 On the basic principles and procedures for the evaluation of higher education of March, 20 2001, as well as the LU PSK “Procedure for Examination of Study Courses” and the LU PSK “Regulations for the State Final Examination”. When starting to work with students, the lecturers acquaint the students with the requirements of the study course and with the knowledge skills assessment system.

In order to achieve the goals of study courses, the study process is organized in auditoriums, practical training rooms, laboratories, computer rooms and institutions, in accordance with the study programme. The choice of study form is determined by the aim and content of the study course. Implementation of the study programme is realised using various methods that allow to ensure the achievement of study results and promote the organization of a student-centered study process.

- Lectures - are used for teaching both general education and branch study courses, as well as professional specialization study courses. Within this, students are presented with theoretical questions, illustrated with practical examples.
- Seminars are a supplement to theoretical and practical knowledge of current issues. Seminars use in-depth discussion of issues from the study literature in a group of students - 10 - 15 students. Seminar classes, for example, are used for the acquisition of foreign languages, integration of theoretical knowledge of anatomy and physiology in practical situational tasks, as well as acquisition of business competencies.
- Group work is one of the forms of skills acquisition, which not only strengthens the material acquired in lectures and seminars, but also develops students' communication and work organization skills. Group work is intended, for example, for study courses, basics of project development and management, basics of culture and art.
- Practical classes ensure the acquisition of skills and abilities specified in the study courses.To ensure the quality of the acquisition of professional study courses, the groups of practical classes consist of 5 - 8 students, and the duration of practical classes from 3 - 6 academic hours.In practical classes, students strengthen their skills and abilities in diagnosing different skin types and conditions, perform skin care procedures using the necessary materials and hardware technologies, perform a wide range of high-risk procedures, such as mesotherapy, micropigmentation, maintaining a safe work environment for infection control.The organization of practical classes in the pre-clinic classrooms and practical classrooms of the college has both simulation devices and mulages, as well as equipment that meets the requirements of the industry and the latest medical trends.
- Independent work is done individually or in groups, it promotes students' ability to independently perform certain tasks. The aim of independent work is to get acquainted in depth with the topical issues of the study subject, to improve the skills of scientific research work and to connect the acquired theoretical knowledge with practice. Independent work promotes the student's desire for independence, at the same time providing guidance and support for the teaching staff. Depending on the specifics, in several study courses the tasks of independent work are developed, for example, in decorative cosmetology a report with visual materials on fashion makeup types.

In the study process, guest lectures are also provided, attracting highly qualified local and foreign specialists. At the beginning of the semester, the lecturers of the program confirm the times of weekly consultations for the successful course of the study process. The duration of consultations is not less than two academic hours per month.

Assessment is the basis for study content, forms, organizational planning, compilation, analysis processes to ensure the professional development of young professionals. Assessment gives students the opportunity to show the extent to which they have achieved the expected results by receiving feedback on the learning process.

Lecturer of each course has developed an assessment methodology, but the assessment system is discussed in the Medicine Study Programme Council and, as a result, additions are made if necessary. The assessment methodology indicates what percentage of the total assessment each assessment criterion makes up and introduces it to the students at the beginning of the study course. Analyzing the requirements for obtaining credit points included in the course descriptions, it must be concluded that on average 50% of the assessment consists of the final examination of study courses. The form of the examination is determined in the study program.

The examinations are divided into regular examinations, final examinations of the study course, and state final examinations. For successful acquisition of the study programme, students must attend all study courses and successfully pass intermediate examinations, tests, exams and receive a positive evaluation in accordance with the regulations of the LU PSK. If the student is dissatisfied with an assessment, according to the LU PSK study course examination procedure, the student has a right to challenge the lecturer's assessment within one week after announcing the examination results by submitting an appeal to the department, which is considered by the study program council, and receive an answer within 7 days.

- Regular examinations are examinations organized during the acquisition of the study course, which are organized and managed by the lecturer of the study course. The types of regular examinations are - tests, analysis of problem situations, reports in seminars, practical works, reports and other forms that promote qualitative acquisition of the study subject.
- The types of final examinations are an examination or test, which is specified in the study programme. They are evaluated with a mark in a 10-point system. The examination or test is successfully passed if the student obtains a grade of no less than 4 points (almost average). The examination or test is taken by the lecturer of the study course or a lecturer appointed by the department. The minimum amount of the study course to organize the exam is 2 credit points. The test results are recorded in the test report.
- At the end of the study process, a qualification examination must be taken, the components of which are the presentation of the qualification paper and the integrated theoretical exam, which is assessed on a 10-point scale. The organization and content of state final examinations are regulated by the Regulations P. Stradiņš Medical College of the University of Latvia on state final examinations. The presentation of the qualification paper is regulated by the procedure for the development and defense of the qualification papers P. Stradiņš Medical College of the University of Latvia. The integrated theoretical exam includes a presentation of a theoretical question and an analysis of the practical situation. The student answers three theoretical questions by lot and performs one demonstration of a practical task. The total amount of theoretical questions is 50. The assessment of the integrated theoretical exam consists of 40% of the theoretical question and 60% of the practical task demonstration assessment.
  The evaluation system is analyzed and improved regularly.
  It should be added that the form of part-time studies was not implemented in this reporting period, but no different teaching methods are planned for its implementation.

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 practice of beauty specialists in cosmetology is organized in accordance with the state standard of first level professional higher education. The internship is regulated by the internship regulations of P. Stradiņš Medical College of the University of Latvia and the tripartite internship agreement between the college, the student and the internship place. The total amount of practice is 20 CP (30 ECTS) *(3.3.tab.).*

Table 3.3.

Depiction of the total volume of practice

No	Title of the practice part	CP/ ECTS	Time of implementation	
			Full-time studies	**Part-time studies**
1.	**Healthcare**	**4 CP** 6 ECTS	1st study year (2 semester)	1st study year (2 semester)
2.	**Qualification practice**	**16 CP** 24 ECTS	3rd study year (6 semester)	4th study year (7th semester)

The overall goal of the study practice is to prepare students for the profession of beauty specialist in cosmetology with appropriate professional competencies in medical treatment, who provide a wide range of cosmetology and esthetic medicine services in the field of health care, including skin condition (norm / pathology) diagnostics, care cosmetology procedures and / or manipulations, and take preventive measures, including educating the client on health issues in accordance with their professional competencies. The student can work in medical institutions and beauty care institutions, under the guidance of a certified health care or beauty care specialist.

A programme has been developed for the internship, which is introduced to the student and the head of the internship. The student is free to attend a place of internship of his/her own choosing, or the programme administration provides support in finding an internship place.

The aim of health care practice is to strengthen knowledge and develop skills in the care of patients with health disorders, with special emphasis on the care of patients with skin diseases. In practice, the student applies his/her communication skills in the care of patients of different age groups in accordance with professional ethics, examines patients, health and skin assessment, evaluates subjective and objective information, applies physical examination methods and using available documented information and information sources, documents medical care and clinical procedures, assesses the patient's response, analyzes therapeutic activities, documents the performed procedure, performs preventive measures, including educating patients on health issues, provides nutritional recommendations.

The aim of qualification practice is to strengthen the student's skills and abilities in the specialty. In qualification practice students participate in the organization of salon work, develop the ability to assess the role of communication in the professional customer service process, develop communication competence by forming a benevolent, understanding and professional dialogue with clients and colleagues, organize themselves for work, clean the work environment, work in accordance with procedure, perform facial skin and body diagnostics and, in accordance with the limits of their professional competence, make a decision on the performance of necessary facial and body aesthetic care procedures, perform decorative, cosmetological and esthetic medical procedures, use equipment technologies, necessary materials and cosmetics, evaluate and document the results, as well as understand the issues of occupational safety and infection control, educate the client, creating their understanding of health promotion and disease prevention, face and body skin care, various cosmetic to home use.

The evaluation of practice is performed in accordance with the internship program. After the end of a practice, the student submits a practice report and a confirmation of the internship place to the head of the college internship within a certain period of time. Assessments of qualification practice are carried out in a 10-point system, which consist of an assessment of the practice diary and a description of the practice place, which is performed according to the criteria of a certain form. The internship is evaluated according to the criteria by the direct practice supervisor - the responsible person under whose leadership the student performs the practice tasks.

The connection of the students' practice tasks with the study results to be achieved in the study program is visible in table 3.4.

Table 3.4.

Linking tasks of the *Esthetic cosmetology* study programme practice with the results of the study programme

Results of the study programme	**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**
Tasks of study practices	Performs facial skin and body diagnostics and, in accordance with the limits of his/her professional competence, makes a decision regarding the performance of the necessary aesthetic face and body care procedures, documents the obtained data;	Selects and performs decorative and cosmetological procedures, uses hardware devices, materials and cosmetic products, evaluates and documents the obtained results;	Selects and justifies depending on the client's cosmetic problem, the use of cosmetics for each client for home use;	Educates the client / patient and develops awareness of health promotion and disease prevention;	Evaluates the patient's state of health and performs medical care and clinical procedures, observing the maintenance of a safe working environment in connection with the control of infection;	Plans and performs his/her activities within the limits of its professional role and competence on the basis of regulatory normative documents, observing the principles of personal data protection and information confidentiality.	Evaluates the role of communication in the professional customer service process, develops communication competence by creating a benevolent, understanding and professional dialogue with customers, employers and colleagues;
To get acquainted with the place of practice, goals, tasks						+	

To be able to plan their work, maintain the cleanliness of the work environment,					+	+	
To apply communication skills in work with clients and colleagues;				+			+
To strengthen theoretical knowledge and skills in the assessment of the client's facial and body skin condition, determining the cosmetic diagnosis and the purpose of the procedure, documents the obtained data;	+						
To perform beauty treatments according to the client's cosmetic diagnosis;		+					
To understand and perform patient examinations, health condition and skin assessment, using available documented information and information sources, document the obtained data;	+				+		
To perform the prescribed medical care and clinical procedures, to evaluate the patient's reaction, to analyze the therapeutic activities, to document the performed procedure;					+		
To educate the client / patient on skin care and health issues;			+	+			
To observe professional ethics, moral and ethical norms, principles of confidentiality in the cosmetology of a beauty specialist.						+	+

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 choose the topic of their qualification paper in accordance with the *Procedure for Development, Submission and Presentation of the Qualification Paper Developed* by the LU PSK.

The student has an opportunity to offer a topic of his / her choosing based on his / her knowledge and professional skills. If necessary, the student can consult with the teaching staff of the programme about topicality of the theme. Qualification work must be related to professional qualifications, applied and practically applicable in a professional environment. After choosing the topic of the qualification paper, a supervisor of the qualification paper is appointed.

Each year, students present their research topics at local and international conferences. For example, at the 2017 International Scientific Conference “Health. Wellness. Practice” the paper on “Applicability of collagen in esthetic cosmetology” was presented. The qualification paper was evaluated very highly.

After the presentation session of the qualification examination, head of the state final examination commission provides his/her assessment of the procedure and topics chosen by the students.

The aim of the Esthetic Cosmetology study programme is to ensure the provision of high-quality medical services based on knowledge of the norms and pathology of the human body structure and physiology. In accordance with the goal and research strategy, students carry out research on Health aspects in gerontology - The applicability of chemical peels in solving the problems of aging skin condition and the application of collagen induction therapy in the anti-aging procedure of hand skin. In the topicality about the health of young people and the habits influencing it, research - The opinion of beauty care specialists on the care and prevention of the problematic skin condition of teenagers. Including the topicality of the field about the biopsychosocial model in medicine, research - Competences of beauty care specialists in customer service in cases of oncological diseases. Physiological and psychosocial aging processes are considered in the study - Skin problems during pregnancy and skin care at home. A multidimensional approach to patient care, analyzed in the study - Angioma as a beneficial vascular formation and its elimination possibilities. In 2020, COVID - 19 preventive measures and infection prevention in beauty care institutions were analyzed in terms of topicality. In collaboration with Biomedical Laboratory students and Esthetic Cosmetology students, research has been conducted on the diversity of microorganisms on the rings during the provision of beauty care services. Testing of make-up brushes and effectiveness of cleaning products.

The choice of the topic of the qualification papers is determined by:

- revelence in the industry. Academic staff discuss and propose research topics with industry professionals;
- research directions of internal scientific projects;
- College research strategy.

The qualification paper must be related to professional qualifications, applied and practically applicable in a professional environment.

Table 3.5.

Evaluation of qualification works of the *Esthetic cosmetology* study programme

Academic year	**Evaluation in points**							**Number of graduates**
	4 almost satisfactory	**5** satisfactory	**6** almost good	**7** good	**8** very good	**9** excellent	**10** with distinction	
2013/14	-	-	1	1	10	6	-	18
2014/15	1	-	2	7	16	13	1	39

2015/16	-	-	3	4	7	9	8	31
2016/17	-	3	1	7	9	10	4	34
2017/18	1	1	3	7	4	14	-	30
2018/19	1	-	3	10	3	6	1	24
2019/20	-	1	3	1	5	8	4	22
Number:	**3**	**5**	**16**	**37**	**54**	**66**	**17**	**198**

The topics of the Esthetic Cosmetology study programme qualification works fully correspond to the content and requirements of the study programme, as well as the current issues of the modern labor market. From academic year 2013/2014, 198 beauty treatment specialists have graduated from the LU PSK *(table 3.5.).*

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 main source of funding for the *Esthetic cosmetology* study programme is personal funding.

The study process is implemented in well-equipped college auditoriums, pre-clinic offices (procedure equipment room, emergency medical care room and massage room) and practical classes rooms (cosmetology, SPA, manicure and pedicure rooms).

Since the study year 2013/2014 until the study year 2020/2021 practical classrooms are regularly supplemented and renewed with the material and technical provision necessary for the implementation of the study program. In 2019, the practical cabinet of cosmetology was supplemented with a multifunctional couch, a chair and a work-table with glass shelves and a drawer, creating an opportunity to realize another workplace in practical classes. 7 fluorescent lamps with a magnifying glass, facial diagnostics and high-quality performance of the necessary manipulations were restored at the workplaces. In 2015, the micro-camera CCL-215 with software for skin and hair diagnostics was purchased, in 2019 another innovative, face and body skin diagnostic device APPAREIL Skinte Diag V2 was purchased, which are necessary not only for ensuring a high-quality study process, but also for students' research activities. . In the period from 2017 to 2019, practical cosmetology cabinets were supplemented with five innovative, multifunctional Catio Vital Lift-v04, Hydraderm lift, Hydraclean professional hardware technologies, developing a wider acquisition of new skills for students.

Between 2015 and 2019, pre-clinical and treatment rooms were equipped with 55-inch monitors and computers with Internet access to visualize how to manipulate according to industry standards, thus complementing the learning process with learning conditions for cognitive manipulations.

From the spring of 2020, the facilities provided by the Microsoft Office365 platform have been

implemented at the University of Latvia. Academic staff and students have access to an interactive environment, in which it is possible to additionally organize the learning process, also using the interactive Microsoft TEAMS platform. Every year, the computer equipment and software required for the study process is improved and supplemented. There are 18 workplaces for students and 1 workstation for a lecturer equipped with a multimedia projector.

The library provides students with study literature and periodicals in Latvian, English, German and Russian. Periodicals in Latvian, German and Russian are subscribed: "Doctus", "Latvian doctor", "doctor", "Le Nouvelles Estetiques Latvia", "Cosmetics and medicine". Every year the library fund is supplemented with new study materials. Students have access to the EBSCO database, the resources of which can be used both in person and remotely.

In general, the resources and provision of the study programme correspond to the conditions and results of the implementation of the objectives of the study programme. Regular addition of material and technical base ensures achievement of high-quality planned study results.

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).

In the Esthetic Cosmetology study programme, the main source of funding is student self-financing. Self-financing of a study place in the Esthetic Cosmetology study programme per one student is 2000 EUR. The real costs of the study programme per student are shown (Table 3.6). Funding for full-fledged implementation of the study programme is obtained from the college's income and projects financed by European Union organizations and other international organizations. The minimum number of students to ensure the profitability of the study programme is 15.

Table 3.6.

Cost calculation of the Esthetic Cosmetology study programme (full-time and part-time studies)

Salary per one study place	Employer's compulsory state social insurance contributions per one study place per year	Cost of business trips and travel per one study place per year	Service costs per study place per year	Costs of materials, energy resources, water and inventory per study place per year	Cost of purchasing books and magazines per student per year	Equipment purchase and modernization costs per study place per year	**Cost per study place**

1464.19	345.4	23.3	219.56	88.13	7.99	83.77	**2532.37**

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.

Qualification of the teaching staff involved in implementation of the *Esthetic cosmetology* study programme study courses complies with the requirements of regulatory enactments and the strategic goals set by the college. 44 lecturers are involved in implementation of the study programme, 20 of which are academic staff (elected in LU PSK), 1 guest lecturer and 23 invited lecturers. One lecturer with a doctor's degree in medicine, 1 lecturer with a doctor’s degree in management sciences, education management, 1 lecturer with a doctor’s degree in engineering, 32 lecturers with master’s degree and 5 lecturers with a bachelor’s degree, as well as 1 lecturer with first level higher education and 4 lecturers with secondary professional education.

The qualifications acquired by the teaching staff play a very important role in enabling students to acquire a wide range of knowledge and versatile skills and to develop professional competencies under the guidance of lecturers. The majority of lecturers are certified professionals who specialize in their respective professional field and have worked for a long time, or work in related professions, thus ensuring the quality of the study results to be achieved. In addition, the teaching staff involved in the implementation of the study program has a higher pedagogical education, a master's or doctoral degree in educational science, allowing to ensure the link between practice and science, and the involvement of students in research.

By improving and enhancing the qualification of the teaching staff, students are provided with current innovations in the field within the study course. For example, the lecturer of the study courses “Clinical conditions in dermatology”and “Medical cosmetology”, has regularly participated in international continuing education courses, which cover current issues related to skin care options in cosmetology for clients with oncological diseases, as well as innovations in skin diagnostics. Continuing education courses took place in Tallinn (Estonia) on 06.07.2019. "Practical course of dermatoscopy"; Berlin (Germany) January 16-18, 2020 "School of Dermatology".

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.

Table 3.7.

Number of teaching staff involved in realization of the study programme

Post	2013/2014	2014/2105	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021
Associate professor	4	4	5	5	5	5	4	4
Lecturers	11	11	11	11	12	12	13	16
Assistants	-	-	-	-	-	-	-	-
Guest lecturer	-	1	1	1	2	1	1	1
Teachers	11	10	19	21	18	20	19	23
Altogether	26	26	36	38	37	38	37	44

During the reporting period, significant changes were observed in the composition of the teaching staff implementing study courses in the *Esthetic cosmetology* programme.

- The number of elected docents in the academic staff has decreased from 5 to 4, starting academic year 2019/2020. A lecturer with a doctor's degree in medicine, for example, I. Briža. The lecturer has the necessary knowledge and skills in research, which allows students to develop research skills within the study course.
- The number of lecturers in the reporting period has increased from 11 to 16. 1 guest lecturer is involved in the implementation of the programme.
- The stability of the number of elected lecturers forms the core of the program implementers, which allows to implement the latest solutions in the development of the program faster in the long run.
- Compared to 2013/2014 the number of invited lecturers has significantly increased from 11 to 23. The percentage of teaching staff involved in the study programme - the academic staff vs the invited lecturers in 2013/2014 is as follows - 58% are academic staff and 42% are guest lecturers. Starting from 2016/2017 there is a slight tendency to decrease the percentage of the number of academic staff involved in the implementation of study courses compared to the number of invited lecturers, where on average 45% are academic staff and 55% are invited lecturers.
- In the implementation of study courses, such as “Mesotherapy”, “Medical cosmetology”, “Basic trichology”, “Micropigmentation” it is important to attract specialists who work in the relevant field and are able to develop the necessary professional skills.
- Risks that may affect the quality of the study process are the involvement of teachers in such study courses as, for example, “Micropigmentation”, “Mesotherapy.” Risks are related, firstly, to the high workload of these specialists in health care institutions, and secondly, uncompetitive remuneration. The College needs to find motivating factors for attracting these faculty to ensure the long-term stability of the program.

In realization of the “Esthetic cosmetology” study programme basic courses 44 CP (66 ECTS) or 50% are implemented by the academic staff of the college and 44 CP (66 ECTS) or 50% by invited lecturers (excluding free choice study courses, qualification work management).

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 teaching staff involved in implementation of the *Medicine* study programme cooperates with each other to analyze and improve the content, connection and succession of study courses. The study programme manager, study course lecturers and practice managers participate in the meetings of the study programme council of the Department of Medicine to discuss the results to be achieved by the study courses and the content of the courses, thus avoiding duplication of information.

Relationship between the number of students and the teaching staff within the study programme of study year 2020/2021 is 3.5, which is the number of students (157) against the number of teachers (44).

The cooperation of the teaching staff between study programmes of the Department of Medicine takes place in the development of students' qualification papers, management of internships and teaching of study courses.

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_29_Sample_Of_The_Diploma_To_Be_Issued_In_The_Study_Program_Esthetic_cosmetology.pdf	29_P_Studiju_Programmas_Estētiskā_Kosmetoloģija_Izsniedzamā_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	ANNEX_30_Statistics_On_Students_In_The_Reporting_Period_In__The_Esthetic_Cosmetology_Study_Programme.pdf	30_P_Statistika_Par_Studējošajiem_Studiju_Programmā_Estētiskā_Kosmetoloģija.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_31_Compliance_Of_The_Study_Program_Esthetic_Cosmetology_With_The_State_Education_Standard.pdf	31_P_Studiju_Programmas_Estētiskā_Kosmetoloģija_Atbilstība_Valsts_Izglītības_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)	ANNEX_32_Compliance_Of_Professional_Aualification_Attained_In_Esthetic_Cosmetology_Study_Programme_With_Professional_Standard.pdf	32_P_Studiju_Programmas_Estētiskā_Kosmetoloģija_Kvalifikācijas_Atbilstība_Profesijas_Standartam.pdf
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)	Compliance_Esthetic_Cosmetology_Study_Programme_With_Industry-specific_Regulations.pdf	Studiju_Programmas_Estētiskā_Kosmetoloģija_Atbilstība_Nozares_Specifiskajam_Normatīvajam_Regulējumam.pdf
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	ANNEX_33_Mapping_Of_Study_Courses_For_Achieving_The_Study_Results_Of_The_Study_Program_Esthetic_Cosmetology.pdf	33_P_Studiju_Programmas_Estētiskā_Kosmetoloģija_Studiju_Kursu_Kartējums.pdf
The curriculum of the study programme (for each type and form of the implementation of the study programme)	ANNEX_34_Study_Plan_Of_Study_Program_Esthetic_Cosmetology.pdf	34_P_Studiju_Programmas_Estētiskā_Kosmetoloģija_Studiju_Plāns.pdf
Descriptions of the study courses/ modules	ANNEX_35_Descriptions_Of_Study_Courses_In_Study_Program_Esthetic_Cosmetology_Full-time_Part-time_studies.pdf	35_P_Studiju_Programmas_Estētiskā_Kosmetoloģija_Studiju_Kursu_Apraksti_Pilna-laika_Nepilna-laika_Studijās.pdf
Description of the organisation of the internship of the students (if applicable)	ANNEX_36_Study_Programs_Esthetic_Cosmetology_Student_Practice_Organizations_Description.pdf	36_P_Studiju_Programmas_Estētiskā_Kosmetoloģija_Studējošo_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)		

Radiographer (41721)

Study field	*Health Care*
ProcedureStudyProgram.Name	*Radiographer*
Education classification code	*41721*
Type of the study programme	*First level professional higher education study programme*
Name of the study programme director	*Elita*
Surname of the study programme director	*Rutka*
E-mail of the study programme director	*Elita.Rutka@lupsk.edu.lv*
Title of the study programme director	*Mg.sc.educ.; Bc.sc.sal.*
Phone of the study programme director	*+371 29177817*
Goal of the study programme	*To prepare competent, modern, professional specialists in radiography, radionuclide diagnostics to work with modern digital technologies in radiology and nuclear diagnostics, at the same time ensuring students' personal development, and the opportunity to improve themselves by continuing their studies in the professional bachelor's study program Radiography at the University of Latvia.*
Tasks of the study programme	*1. To ensure compliance of students' theoretical knowledge, practical skills and professional attitude with the professional standard of a radiographer, labor market requirements and international practice.* *2. To ensure acquisition of students' professional knowledge and skills in radiography and mammography examinations, ionizing radiation dose optimization, patient care process, radiation safety and protection.* *3. To ensure acquisition of students' professional knowledge and skills in image acquisition in radiography, its digital post-processing, criteria analysis, creation and maintenance of a digital archive (PACS), quality assurance of examinations.* *4. To ensure acquisition of students' professional knowledge and skills in the process of patient care in radiography, computed tomography, magnetic resonance imaging, ultrasonography, radionuclide diagnostics, radiation therapy.* *5. To ensure the use of professional skills and academic knowledge in practice during studies.* *6. To promote students' creative, research and social activities.* *7. To promote students' high professional responsibility, medical ethics, basic social skills in communication, independent and team work.* *8. To create necessary conditions for the training of highly qualified radiography specialists who are competitive in the Latvian labor market.* *9. To ensure a flexible approach to the content of the study process in relation to the changing economic situation.*

Results of the study programme	*Knowledge* *1. Knows National and European legislation in the field of radiation safety, quality of work and safety, business fundamentals, civil protection institutional regulations, MS Word, MS Excel, MS Power Point, patients' rights and radiation dose optimization principles;* *2. Explains radiation physics, application of technologies in radiology, nuclear medicine and radiation therapy, cell biology, environmental protection processes;* *3. Knows normal human anatomy and physiology, pathological physiology, immunopathology, pharmacology, contrast media, use of radiopharmaceuticals;* *4. Understands the process of patient care in radiology, radiotherapy, basics of psychology, pedagogy, security of physical patient data processing, observing radiology examination tactics, choice of protocols in radiology methods according to clinical situation, topographic and X-ray anatomy of internal organs, Latin and foreign language terminology;* *5. Classifies the principles of management, professional ethics, communication and communication in the specialty of a radiologist's assistant, the application of research methodology, numerical data processing methods.* *Skills* *6. Performs positioning of patients in radiography, radiography pediatrics, mammography, computed tomography, magnetic resonance imaging, in accordance with the examined body part, anatomical structure, pathology and requirements of diagnostic radiology image criteria;* *7. Performs radionuclide diagnostics and invasive radiology manipulations in accordance with the projection standard, observing occupational safety, radiation protection and provision, dosimetry, quality criteria and application of safe technologies;* *8. Determines the choice of aids and protective equipment in accordance with the anatomical structure of the examination, image quality criteria and dose parameters of the received radiation;* *9. Analyzes the obtained image quality criteria, factors affecting image quality, post-processing, digital image archive maintenance (PACS), in accordance with the image circulation procedure;* *10. Evaluates the examination tactics, emergencies, cases of injuries, indications, contraindications in accordance with the radiological examination to be performed, the choice of contrast media, radiopharmaceutical, the method of administration, observing the technical standards of procedures and sanitary and hygienic norms;* *11. Performs patient care in radiology, emergency care, education, perceives a person as a bio-psycho-social whole, observes the principles of medical ethics, culture, communication, uses professional terminology in Latin and a foreign language;* *Competences* *12. Ensures compliance with radiation safety regulations, imaging techniques, application of technology in obtaining a positive result, calculation of the dose of ionizing radiation received by the patient, radiation safety and protection requirements, safe environment protection, sanitary and hygienic norms in diagnostic radiology, nuclear medicine and radiation therapy;* *13. Uses projection standards of X-ray examinations in accordance with the indications of the examination, peculiarities of X-rays and scattered radiation, quantity and quality of X-rays, factors that affect the quality of work during the diagnostic procedure;* *14. Ensures the registration and acquisition of conventional and digital images, quality criteria for radiographic and mammographic images, accurate input and processing of patient data in the radiological information system;* *15. Evaluates diagnostic findings, symptoms, skeletal radiography, compliance of anatomical structures with the radiological procedure, indications and contraindications, risk groups, in accordance with the examination to be performed and the clinical situation.*
Final examination upon the completion of the study programme	*Qualification paper and an integrated examination.*

Study programme forms

Full time studies - 3 years - latvian

Study type and form	*Full time studies*
Duration in full years	*3*
Duration in month	*0*
Language	*latvian*
Amount (CP)	*120*
Admission requirements (in English)	*General or vocational secondary education*
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	*Radiographer*

Places of implementation

Place name	City	Address
P.Stradins Medical College of the University of Latvia	JŪRMALA	VIDUS PROSPEKTS 38, JŪRMALA, LV-2010

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.

Since the previous accreditation of the study field, the parameters of the Radiographer study programme have been changed, which is related to the rapid development of the radiology industry, the entry of digital technologies, programmes and methods into the labor market. The aim of the study programme has been clarified, where the method of radionuclide diagnostics has been replaced by the term nuclear diagnostics, which includes a wider professional meaning.

The study results to be achieved in the study programme have been improved, precisely defining the acquired knowledge, skills and competencies in accordance with the updated professional standard. At the end of the study programme, a part of the final examination has been changed, replacing the test with an integrated examination in accordance with the new competences approach.

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.

Parameters of the first level professional higher education study programme Radiographer in accordance with: Directive 2005/36 / EC of the European Parliament and of the Council on the recognition of professional qualifications; The Law of the Republic of Latvia on Regulated Professions and Recognition of Professional Qualifications; Regulations No. 141 of the Cabinet of Ministers of March 20, 2001 Regulations on the State First Level Professional Higher Education Standard; LR Vocational Education Law; Law of the Republic of Latvia Amendments to the Law on Higher Education Institutions; LR Medical Law; Cabinet Regulation No. 268 of March 24, 2009 On the Competence of Medical Practitioners and Students Acquiring First or Second Level Professional Higher Medical Education Programs in Medical Practice and the Amount of Theoretical and Practical Knowledge of These Persons; Regulations No. 460 of the Cabinet of Ministers of June 6, 2006 Regulations on the List of Specialties, Subspecialties and Additional Specialties for Regulated Professions; The Law of the Republic of Latvia on Radiation Safety and Nuclear Safety as amended; Cabinet Regulation No. 716 of December 5, 2017 Regulations on the Requirements for the Minimum Requirements for the Content of the Compulsory Civil Protection Course and the Content of Civil Protection Training for Employees; Professional standard Radiographer.

Duration of the study programme, 3 years, is closely related to the skills, professional knowledge and competencies specified in the professional standard. The specified duration of studies allows to achieve the set goal of the study programme and acquires the necessary skills for performing professional activities.

According to the education classification code of the Republic of Latvia, the code of a Radiographer is 41721, where the first two digits correspond to the second qualification level - the first level professional higher education, to be implemented after obtaining general or professional secondary education. Duration of full-time studies is two years. The other three digits of the code identify the corresponding education thematic group (health and social welfare), the education thematic area (health) and the curriculum group (treatment).

The study program corresponds to the level of 5 Latvian Qualifications Framework, which determines the relevant knowledge, skills and competencies.

The parameters of the study program are interrelated and correspond to the professional qualification to be obtained.

Radiographer study programme works in accordance with the professional qualification, the aim of the study programme, set tasks and study results to be achieved, which meet the requirements.

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

Rapid development dynamics of the radiology industry, complex entry of digital technologies into the labor market with diagnostic radiology digital image post-processing 3D functions and digital archive (PACS) maintenance capabilities, Radiology Information System (RIS) software related to accurate patient data, as well as examination data registration and analysis, thus appropriate professionally trained specialists and radiographers are needed, who would perform all the above-mentioned functions necessary for the modern radiology industry. The Radiographer study programme, in close cooperation with professional associations in the field, ensures the preparation of new specialists for all modern labor market requirements and international educational trends, confirmed by the European Federation of Radiographers' Associations (EFRS) higher education branch HENRE. The Radiographer study programme is the only one in Latvia that prepares the necessary and required specialists for the Latvian labor market, working not only in radiography, but also in invasive radiology and radionuclide diagnostics, whose competence corresponds to the recommendations of Latvian Radiographers and Radiology Assistants and Latvian Radiologists Associations.

In co-operation with the Latvian Association of Radiographers and Radiology Assistants, assessment of employment of graduates of the Radiographer study programme during the reporting period was carried out. It was found that 95% of graduates successfully work in the chosen profession in one of the Latvian medical institutions, 5% do not work in the Latvian labor market, but abroad, for example, in England. 80% of graduates continue to improve themselves in the LU professional bachelor's study program Radiography.

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.

Table 3.1.

Statistical data on students of the *Radiographer* study programme of the college

Study year	Number of students in budget financing of the programme	Number of graduates in the budget financing of the programme	Number of dropouts
2013/2014	74	13	11
2014/2015	74	24	9
2015/2016	71	16	13
2016/2017	68	18	6
2017/2018	87	22	14
2018/2019	78	21	13
2019/2020	87	25	22
2020/2021	87	-	11

Analyzing statistical data for the reporting period of 2013/2014 till 2020/2021, it can be concluded that the number of students and graduates has a tendency to increase, which is significant, when taking into account the large demand for professionals in the labour market. Analyzing the data on student drop-out in the reporting period,
the most common reason for this mentioned is non-compliance with the requirements of the study programme, non-compliance with the internal rules of procedure, which could be explained by the student's lack of interest in studies, choice of the wrong professional programme.

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.

First level professional higher education study programme Radiographer is implemented at the Department of Medical Technologies of the LU PSK.At the beginning of the study program, a labor market analysis was carried out, in which it was found that the labor market was rapidly aging, more than 75% of those working in the profession had reached retirement age and older, thus a mutual agreement was reached with Ministry of Health Main Specialist in Radiology and Latvian Radiographers and Radiology Assistants, for 25 radiology assistants needed for the labor market per year.

Analyzing the number of vacancies in the labor market, it can be concluded that the profession of a radiology assistant is in great demand and need, as evidenced by the increase in the number of potential students in the Radiographer study program in recent years. The structure of the study program is shown in table 3.2.

Table 3.2.

Structure of the *Radiographer* study programme

Number	**Study courses**	**Type of study courses**	**Study programme 120 CP** (180 ECTS)
1.	General education study courses with the included 6 CP (9 ECTS) module for development of business professional competencies	A	**20 KP** (30 ECTS)
2.	Branch specific study courses		**70 KP** (105 ECTS)
2.1.	Compulsory study courses	A	*45KP*
2.2.	Compulsory choice courses – vocational courses	B	*21 KP*
2.3	Free choice	C	*4 KP*
4.	Practice	A	**22 KP** (33 ECTS)
5.	Qualification work	A	**8 KP** (12 ECTS)

To promote acquisition of professional knowledge by students, employers recommended to find an opportunity to increase the number of contact hours in the programme, reducing student independent work hours in general education courses and industry courses by 25% of study courses which is especially important when acquiring professional study courses, such as Skeletal X-Ray, Projection Training; Image diagnostics; Systems training; Radiography in paediatrics, etc. During the reporting period, a special digital image processing simulation class with diagnostic workstations was established at the college, 3D image processing functions and radiology information system integration, students were given the opportunity to develop digital image quality criteria evaluation and processing practical skills in a pre-clinical room (simulation class), meeting all the requirements of modern high technology in the presence of a highly trained professional in the field.

Thus, taking into account the trend of modern diagnostic radiology and innovation opportunities for remote digital image evaluation and diagnostics, the study programme qualification practice is also modernized, which was 16 CP (24 ECTS), creating a new 14 CP (21 ECTS) qualification practice, transferring 2 CP (3 ECTS) to practice Introduction to radiology methods, computed tomography (CT) and magnetic resonance (MR) methods for the acquisition of diagnostic image processing in a preclinical simulation class.

Changing the form of the State examination, from a theoretical examination to an Integrated examination based on practical skills, which combines such study courses as Skeletal X-ray, Projection Study I, II; Radiological Anatomy, General Medicine I, II; Patient care in radiology I, II; Quality assurance and control in radiography; Radiation safety and protection, giving the student an opportunity to strengthen the practical knowledge acquired in the study process in the respective study courses.

Improving the content of the programme in the reporting period, several changes have been made and study courses have been updated. Due to the launch of the professional bachelor's study program Radiography at the University of Latvia in the study year 2013/2014, and in accordance with the recommendation of the Latvian Professional Association of Radiographers and Radiology Assistants, adjustments of branch study courses and separate general education study courses have been made in the Radiographer study programme, with a tendency to balance study courses so as to prepare specialists in radiography and radionuclide diagnostics. Thus, the study course: Radiation Therapy II - 4 CP (6 ECTS) - transferred to the Radiography study programme, in order to prepare professionals for work in Radiation Therapy. Therefore, the study course Radiation Therapy I has been renamed, now being called Radiographer, as the study course - Introduction to Radiation Therapy; Cell biology - 3 CP (4.5 ECTS) has been reduced to 2 CP (3 ECTS); in turn, Quality Assurance and Control in Radiography - 2 CP (3 ECTS) to 3 CP (4.5 ECTS); General pathophysiology and pharmacology from 3 CP (4.5 ECTS) to 4 CP (6 ECTS); Immunopathology from 4 CP (6 ECTS) to 3 CP (4.5 ECTS); General Medicine II from 2 CP (3 ECTS) to 3 CP (4.5 ECTS); The study course Radiography in Pediatrics has been significantly increased from 2 CP (3 ECTS) to 4 CP (6 ECTS).

Fulfilling the requirements of the University of Latvia Order No.1 / 301, and on the basis of the Environmental Protection Law and the Civil Protection Law, as well as the fulfilment of the requirements specified in the State Higher Education Standards, 2016/2017 changes were made in the study plan of the study year.

Study course Work organization, statistics and numerical methods 2CP (3 ECTS) is divided into two study courses: Civil Defence 1CP (1.5 ECTS) and Numerical Methods 1CP (1.5 ECTS). In the study course Medical Technology in Radiology, Radiation Safety and Dosimetry in the amount of 3CP (4.5 ECTS), integrated study course Environmental Protection in the amount of 1CP (1.5 ECTS), thus, the title of the developed study course Environmental Protection, Radiation Safety and Dosimetry, Medical Technology in Radiology 3 CP (4.5 ECTS).

The content of study courses is updated in accordance with the tendencies of scientific and technical development in the field of radiology and the specifics of the labour market. When updating study courses, the parameters of study courses are coordinated with cooperation study programmes of Tartu College Estonia, Karolinska University Sweden, as well as by participating regularly in the HENRE Higher Education Network For Radiography in Europe group. By systematically improving the study programme, an opportunity has been given for the international mobility of students, as well as for the continuation of studies at the University of Latvia in the study program Radiography.

It is important to observe and take into account the information included in the study courses, the results to be achieved, the interconnections of the set goal indicators, the links of the study course goals with the goals of the study program and the results to be achieved.

During the reporting period, the content of study courses was regularly evaluated and, if necessary, updated, in accordance with the needs of the industry, the labor market and scientific trends, for example, at the end of each study year round table discussions are organized, in which the leading teaching staff of the study program Radiographer, members of, *the Latvian Radiographers and Radiology Assistants Association, Latvian Radiologists Association, and Certification Commission*,

discusses the need to make changes in professional study courses related to the development of radiological technologies and methods, for example, the study course Introduction to radiology Methods updates the topics of radiological information systems (RIS), digital image archiving, storage systems (PACS) and information processing, format, storage, data security systems (DICOM). In the study course Environmental protection, radiation safety and dosimetry, medical equipment in radiology, an updated topic on digital image recording equipment in radiology.

The topics included in the study courses derive from the aims of the study courses and the results to be achieved, in accordance with the aim, tasks and results to be achieved of the study program.

An important guarantee of the results to be achieved by the professional programme is to involve active students in the learning process, developing their understanding, interest, responsibility, independent acquisition of material, analysis and logical substantiation. In order to implement a student-centered approach to the study process, it is necessary to observe the following principles - the student being in the center of study process, the lecturer as a coordinator, with his experience, knowledge and professional competence directing the student to active learning and creating professional motivation.

Therefore, it is also important for lecturers to continuously maintain their professional experience by improving it in various further education programs, courses, conferences and seminars, at the same time involving students to actively participate in their research and presentations, developing not only professional competence but also public speaking courage.

To promote practical implementation of study process and integration of students into the professional environment, various events, conferences and guest lectures are regularly organized: International Interdisciplinary Scientific Conference Professional Competences in the Age of Modern Medical Technology Innovation; International Scientific Conference Quality of Health Care and Social Welfare - EDUCATION and PRACTICE; For the International Day of Radiology, creation of informative posters for R1A students on topics such as the development of the X-ray method, the history of Radiology, opportunities in the labor market.

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 courses foreseen in the study programme are implemented in accordance with the descriptions of the study courses, in which the course evaluation system is determined in accordance with LU PSK unified procedure for examinations of study courses.

The assessment system has been developed in accordance with the student-centered education approach in higher education institutions in Latvia, all study courses envisaged in the study programme are implemented in accordance with the study course descriptions, which set out the principles of assessment-based teaching and learning

- the principle of openness of assessment - assessment criteria, in accordance with the aim and tasks of the program, the aim and tasks of the study course with a certain set of requirements, for the assessment of achievement of study results, the set of requirements is indicated in the description of each study course,
- mandatory assessment - positive assessment requirements for each study course, and accordingly for the acquisition of the entire programme content,
- the principle of assessment objectivity - assessment criteria for all students equally, in accordance with the requirements of the educational programme and the conditions of the course,
- Principle of diversity of examination types - examination type requirements determined by each study course developer using the examination types indicated in the course description (independent works, written tests, tests, reports, presentations, laboratory works, group works, etc.). The requirements depend on the specifics of each study course, therefore, both written and oral exams are organized, for example, taking the exam in the study course Skeletal X-Ray, Projection Study II.

The teacher of each course has developed an assessment methodology, which is discussed with others, and as a result, additions are made. The assessment methodology indicates what percentage of the total assessment each assessment criterion makes up, and at the beginning of the study course it is introduced to the students.

Study results are evaluated according to two indicators: qualitative evaluation - a mark in a 10 point system, quantitative evaluation - the number of credit points according to the volume and significance of the study course. The amount of credit points to be obtained is indicated in the study plan. 1 credit point corresponds to 40 hours.

Students are informed about the requirements and assessment procedure for the respective course at the beginning of each semester. A complex method is used in the evaluation of courses, which includes evaluation of students' practical work, individual work, intermediate examinations and examination results. Students are informed at the beginning of the semester in what way, taking into account the results of the semester work, the final result will be determined. In practice, the evaluation process is continuous. Assessment of students of the professional study programme, profiling study courses, such as skeletal radiography, radiation safety and protection, patient care in radiology, radiography in paediatrics, radionuclide diagnostics is a complex consisting of several stages. The final assessment of knowledge of the student is made at the end of the semester after results of all stages: practical work, seminars, independent work, control work and examination are reviewed. The lowest permissible rating is marked 4 (almost average), on a 10-point scale.

Evaluation of the practice is performed in accordance with the developed practice regulations and practice programme. When evaluating the practice report with a mark (on a 10-point scale), the content of the report, characteristics of practice supervisor, practice report evaluation, student's presentation and ability to answer the questions posed by the commission, the internship diary

design and content are taken into account.

A complex approach has been used in the evaluation of qualification paper, the following criteria are taken into account in the evaluation: the quality of the content of the qualification paper development and compliance with methodological instructions for writing the qualification paper; the content of presentation and answers to the questions of the members of the commission and the reviewer; assessment and comments expressed in the review.

For successful continuance of study process, lecturers of the programme confirm consultation times at the beginning of every semester. The consultation schedule is publicly available on the report booth of the Department of Medical Technologies and on the College website.

The international language of the field of radiology is English, in English terminology is used in conferences and congresses, thus, in addition to the state language skills, students are provided with a study course in English terminology.

Students often need knowledge of Russian when performing patient care in radiology, participating in diagnostic examinations, educating patients before and after the examination, thus an elective course in other fields of the study programme includes a Russian language course, which provides students with the opportunity to supplement their Russian language skills, if needed.

The Radiographer study programme is practically implemented in Latvian, to achieve the results of the study courses and the goals of the study program the methods used are theoretical lectures, seminars and practices:

- modern computer technologies, interactive whiteboard, video materials, lecture handouts, guest lectures are used to give lectures. Lectures, seminars and practical classes are held according to a common methodological principle, which allows not only to improve and diversify the acquisition of theoretical study courses, ensuring the interaction of theory, practice and teaching methodology, but also to more objectively assess students' knowledge according to a unified assessment system;
- active forms of learning are used in seminars and practical classes: business games, decision making in small and large teams (group work), decision making independently (individual work), individual homework, problem solving and schematic representation, reports, essays, new book presentations, discussions on current problems in radiography, tests, short written answers to certain questions, meetings, student conferences, debates. It is possible to use laptops in seminars and practical classes;
- methodological materials published on the Internet, as well as printouts are offered for students' independent work;
- students can strengthen their theoretical knowledge in skeletal radiography by working independently in the radiography simulation class, learning the basic principles of skeletal radiography.

The integrated practical classes of the study courses are implemented both in the pre-clinical offices of the college, for example, practice in the study course Skeletal radiography, Projection training, in which students learn the basics of rentgenographyprojections, and internships are organized to strengthen them and in health care institutions, dividing the students into small subgroups, for example, in practice: Radiography, mammography; Radiation safety; Introduction to radiology methods.

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).

Practices included in the study program promote the students' practical understanding and application of the knowledge acquired in the theoretical study courses. *(table 3.3.)*.

Table 3.3.

Practice description of the Radiographer study programme

No	Title of the practice part	Credits		Time of implementation (semester)
		CP	ECTS	
1.	X-ray, mammography	4	6	4th semester
2.	Radiation safety and dosimetry	1	1.5	2nd semester
3.	Technical standards of procedures	1	1.5	1st semester
4.	Introduction to radiology methods II	2	3	5th semester
5.	Qualification practice	14	21	6th semester
	ALTOGETHER :	**22**	**33**	

The content of the practice is developed in accordance with the basic requirements for the professional qualification of a radiographer and the specific requirements necessary for the performance of duties and main tasks in the profession of a radiology assistant, which is determined by the Radiology assistant profession standard. The practice programme has been developed in accordance with the LU PSK Student Practice Organization Procedure. The practice is implemented in accordance with the practice agreement on provision of practice place. Practice agreements are concluded with employers. The practice agreement includes the goals and tasks of the practice, the practice plan, the procedure for evaluating practice achievements, as well as the duties and responsibilities of the parties. The student achieves the goal of the internship based on the acquired knowledge, skills, abilities and previous work experience. During each practice cycle, the student needs to perform a full examination or procedure in the presence of a professional and describe it in the internship diary. The practice is implemented in accordance with the tripartite practice agreement, in cooperation between the college, the student and the practice place.

The main places of practice are VSIA Pauls Stradiņš Clinical University Hospital, SIA Riga East Clinical University Hospital, SIA Jūrmala Hospital, SIA Daugavpils Regional Hospital, SIA Ziemeļkurzeme Regional Hospital, SIA Jēkabpils Regional Hospital, SIA Tukuma Hospital, SIA Jelgava City Hospital, SIA Liepāja Regional hospital, SIA Vidzeme hospital.

To evaluate the connections of the tasks of the students' practices included in the Radiographer study programme with the study results to be achieved in the study programme, a mapping of the results of the practice to be achieved has been made. *(table 3.4.)*.

Table 3.4.

Mapping of the practice results

Results of the study programme **Tasks of study practices**	1. Explains the application of technologies in radiology, nuclear medicine ensures radiation safety and protection requirements	2. Uses patient positioning in radiography, mammography, radionuclide diagnostics, computed tomography, magnetic resonance imaging, according to the examined body part, pathology and requirements of diagnostic radiology image criteria	3. Evaluates aids and protective equipment according to the anatomical structure to be examined	4. Performs the analysis of the acquired image quality criteria, post-processing, sending the digital image to the archive (PACS) digital image acquisition, analyzes the radiographic and mammographic image quality criteria	5. Uses accurate input and processing of patient data in the Radiology Information System (RIS), accurately.	6. Evaluates indications, contraindications according to the radiological examination to be performed, choice of contrast agent, type of administration, observing the technical standard of the procedure and sanitary and hygienic norms, patient care	7. Evaluates sterile materials, disinfectants for invasive procedures or surgery, practically performs clinical manipulations, according to the standard of the procedure.
To get acquainted with the structure of the radiology department, cabinets, equipment principles, radiation safety regulations.	X						
To understand the standard application of procedure techniques, to get acquainted with the clinical environment and classification of disinfectants.							X
To make a choice of aids and protective equipment	X		X				
Too perform X-ray mammography and radionuclide examinations, positioning.		X				X	
To perform dose optimization of ionizing radiation, patient care process, application of contrast agents.	X		X			X	
To understand the indications and contraindications of computed tomography, magnetic resonance imaging, ultrasonography, radionuclide diagnostic examinations						X	
To perform radiography, digital post-processing, criteria analysis, creation and maintenance of digital archive (PACS), examination quality assurance.				X			
To understand the quality criteria of computed tomography, magnetic resonance imaging, ultrasonography, radionuclide diagnostic images.				X			
To perform accurate input and processing of patient data in the radiology information system (RIS), precisely in compliance with the application of regulatory enactments and regulations “Law on Processing of Personal Data” 05.07.2018.					X		

The presentation of students' practice is accepted and the evaluation of practice is performed by a

commission approved by the Department of Medicine, which is formed from the lecturers involved in the study programme. During the presentation (10 min.) the student informs the commission about the main results of the practice, illustrating them with various visual materials. When evaluating the practice report, the commission takes into account the content of the report, the characteristics of practice supervisor, the student's presentation and the ability to answer the commission's questions.

To help students successfully achieve the goal and tasks set within the internship, the internship supervisors are informed about the practical skills and competencies to be acquired during the internship. Practice managers are professionals in their field, certified specialists with extensive work experience in the field of radiological examinations.

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 recommendations of employers and professional associations are defined as the basis for choosing of final topics. Taking into account the current trends in the professional field, the topics of qualification papers are divided into two main directions:

1. Aspect of examinations and diagnostic radiology quality criteria in the evaluation of radiation dose optimization, radiation safety and provision when performing medical irradiation in radiology;
2. Examination of the justification for radiological examinations and descriptions of procedures, in accordance with the Clinical Audit Guidelines, for medical exposure in radio-diagnostics and radiotherapy.

The topics of the final theses are evaluated in the professional environment, the research is analyzed and practically applied in the work conferences organized by the Latvian Association of Radiographers and Radiology Assistants, as well as in the discussions of maintaining professional quality.

At the request of the Board of the Latvian Association of Radiographers and Radiology asistants on April 11, 2019, co-operation was established with the students of the study program Radiographer, that students develop descriptions of radiology examination procedures, based on the theoretical knowledge acquired in the study program and the competencies achieved in practice, for example, study courses such as Environmental protection, radiation safety and dosimetry, medical equipment in radiology; Quality assurance and control in radiography; Skeletal radiography, projection training I, II; Patient care in radiology I, II; Imaging diagnostics I, II; Systems training I, II, etc.

By involving students already during the study process, in the solution of professional issues, they develop their own professional motivation and the importance of belonging, because the

descriptions of radiography examination procedures are a guarantee for the quality assurance of radiography examinations in radiology practice. The examination protocols created by the students in the research part of the qualification paper, each of which is reviewed by the board of the association, and accepted for further progress.

Students choose the topic of their qualification paper in accordance with the *Procedure for Development, Submission and Presentation of the Qualification Paper Developed* by the LU PSK. The student has an opportunity to offer a topic of his / her choosing based on his / her knowledge and professional skills. If necessary, the student can consult with the teaching staff of the programme about topicality of the theme. Qualification work must be related to professional qualifications, applied and practically applicable in a professional environment. Each year, students present their research topics at local and international conferences. For example, during study year 2017/2018, the topic of the *Therapeutic possibilities of invasive radiology for vascular pathologies* was presented at the student conference of the MT department organized by the college. The qualification paper was evaluated very highly.

In the Radiographer study programme, the members of State Final Examination Commission are competent professionals of the field, lecturers of the study programme: chairman of the commission - docent, pulmonologist Viesturs Šiliņš; Dagnija Gulbe, Member of the Commission, Deputy Director for Scientific Work; Assistant Professor Elita Rutka, Head of the Department of Medical Technologies; invited members of the commission - doctor radiologist, lecturer Māra Epermane, head of the Riga East KUS Radiology Center; radiographer, lecturer Vineta Aumeistere Head of the Certification Commission of the Latvian Association of Radiographers and Radiologists' Assistants; Dr. Biol., Lecturer Ainārs Bajinskis University of Latvia assoc. Professor, Director of the Radiographer study programme; radiographer Lauma Breča Pauls Stradiņa KUS, Institute of Diagnostic Radiology, senior Assistant radiologist, member of the European Federation of Radiographers' Associations.

After presenting the qualification paper, the head of the state final examination commission provides his / her assessment of the procedure and topics chosen by the students. As an example, the following qualification papers developed during the reporting period can be mentioned: Description of procedures for sinus radiography; Description of projection protocol for radiograph of cervical vertebrae C1 - C7; Application of the protocol of radiation therapy preparation stage in the practice of a radiology assistant in patients with lung cancer; Projection protocols for the foot and foot joint in radiography; Time spent in patients with acute cerebral stroke during the CT scan; Evaluation of X-ray quality criteria in lung X-ray diagnostics; Computed tomography protocol in the diagnosis of pancreatic adenocarcinoma; Shoulder Magnetic Resonance Imaging Good Practice Protocol; Tactics of a radiology assistant in examining patients with MRI with demyelinating CNS disease and multiple sclerosis; Conventional and tomosynthetic mammography examinations of the breast; Protocol of procedure for examination of the thigh, including the knee joint; Positron emission tomography examination using 18f-fdg radiopharmaceutical in breast cancer diagnosis; Image quality criteria when performing a chest X-ray with a mobile X-ray machine in patients after heart surgery; Patient responsiveness and attitude towards screening mammography examinations; Development of mammography method in breast cancer diagnosis.

According to the evaluation of professional associations, the topics of the Radiographer study programme qualification works fully correspond to the content and requirements of the study programme, as well as the current issues of the modern labor market. During the reporting period, 143 radiographers graduated from the LU PSK. Numerous of the qualification papers presented in the 2019/2020 academic study year received the highest grade. Summary of evaluations of qualification papers in the Radiographer study programme are depicted in table 3.5.

Table 3.5.

Evaluation of qualification works of the *Radiographer* study programme

Academic year	Evaluation in points							Number of graduates
	4 almost satisfactory	**5** satisfactory	**6** almost good	**7** good	**8** very good	**9** excellent	**10** with distinction	
2013/2014	-	2	3	4	2	3	1	15
2014/2015	-	1	5	6	6	6	-	24
2015/2016	1	1	2	3	2	6	1	16
2016/2017	-	3	5	4	3	4	-	18
2017/2018	2	1	1	2	5	11	-	22
2018/2019	-	-	3	4	5	6	3	21
2019/2020	2	1	-	5	4	5	8	25
Number:	**5**	**9**	**19**	**28**	**26**	**41**	**13**	**141**

According to statistical data, students have a serious attitude when developing a qualification paper, because 108 out of 141 students (namely 77%) have received the evaluation good, very good, excellent and even excellent.

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.

Radiographer study programme is realized on state budget funding. State funding for the Radiographer study programme is 65 budget places in the academic year. Funds from the budget are allocated for the implementation of the study programme (salaries, academic staff and social guarantees for students), materials for maintenance and renewal of the technical base, as well as cooperation with labor market representatives.

Taking into account the recommendations of the Accreditation Commission on the need for professional equipment in pre-clinical offices, the material and technical base in the Radiographer study programme has been significantly improved during the reporting period. For practical acquisition of examinations and strengthening of theoretical knowledge, special simulation classes have been created for performing radiological examinations and digital image research:

- Cooperation partner Paula Stradiņa KUS, awarded as a gift (Gift Agreement No. SKUS 472/18) stationary radiography equipment by manufacturer Dornier Model Selector D, with two working stations that allow students practice courses such as Skeletal X-ray, projection training; Radiography in paediatrics; Radiation safety, Radiography specialty and basic

ethical principles; the college purchased mammography equipment MAMMOMAT 3000, created mammography examination simulation class, in which students learn mammography projections according to best Latvian and European standards;

- CT, MR, examination protocols for correct selection and application according to clinical situations have been set up, digital image reconstructions and interpretation, acquisition of radiological examination registration and information system (RIS), digital image archiving, transmission to other workstations, for CD recording and radiological anatomy acquisition, the college has created an examination simulation class equipped with CT, MR and digital radiography workstations, within the ERDF project of the University of Latvia agency Pauls Stradiņš Medical College of the University of Latvia "modernization of premises and equipment" *(Agreement Nr. 2010/0128/3DP/3.1.2.1.1/09/IPIA/VIAA/0170*.
- Digital diagnostic radiology image processing capabilities in a simulation classroom with diagnostic workstations, 3D processing functions and PACS and RIS and (DICOM) integration, students can acquire practical skills in diagnostic image and information processing in the classroom in the presence of a highly trained professional meets all modern high-tech requirements;
- A server with radiology information system support and corresponding programs has been installed, a total of 17 servers purchased;
- Setup for CT, MR and digital radiography workstations: workstations with two LCD 2MP diagnostic medical monitors and one LED color monitor; workstation with two LCD 5MP diagnostic medical monitors and one LED color monitor; two workstations with two LED color monitors; seven digital diagnostic radiology image processing workstations with Radiology Information System (AI-RIS) integration;
- Classrooms are equipped with professional MAVIG equipment, lead rubber of various sizes, thyroid, gonadal, protective apron, semi-apron protective equipment against ionizing radiation, as well as aids necessary for the quality of X-ray projections;
- A demo injector MEDRAD Vistron CT, with MEDRAD Visitron syringes, intended for acquisition of practical skills in the study course Procedural Engineering Standards I and II, preparation and application of contrast delivery system for computed tomography and magnetic resonance imaging.

To ensure the study process in radionuclide diagnostics, as well as the preparation of radiopharmaceuticals and the principles of administration to patients can be mastered using modern laboratories and 2 pieces of equipment that will fully prepare professional students in accordance with modern labor market requirements: E-CAM GAMMA camera and SPECT camera with DT capabilities (SIEMENS).

At the Institute of Diagnostic Radiology of Pauls Stradiņš Clinical University Hospital, students can acquire skills to work with mobile X-ray equipment, dental X-ray equipment, as well as ultrasonographs (US), get acquainted with the principles of work in invasive radiology, participate in angiography AXIOM ARTIS DBA (SIEMENS).

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 financial resources of the College consist of three sources: funding of the Ministry of Education and Science of the Republic of Latvia for the implementation of study programmes, income from paid services and other income of the College, projects financed by European Union organizations and other international organizations. In the Radiographer study programme, the main source of funding are the funds of the Ministry of Education and Science of the Republic of Latvia for the implementation of study programmes. The basic costs of a study place in the Radiographer study programme, budget financing per student are 1630.11 EUR. The real costs of the study programme per student are shown (table 3.6.) Funding for full-fledged implementation of the study programme is obtained from the college's income and projects financed by European Union organizations and other international organizations. The minimum number of students to ensure the profitability of the study programme is 15.

Table 3.6.

Cost calculation of the Radiographer study programme

Salary per one study place	Employer's compulsory state social insurance contributions per one study place per year	Cost of business trips and travel per one study place per year	Service costs per study place per year	Costs of materials, energy resources, water and inventory per study place per year	Cost of purchasing books and magazines per student per year	Equipment purchase and modernization costs per study place per year	**Cost per study place**
1366.94	322.46	27.04	350.04	219.56	7.99	168.63	**2462.66**

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.

Qualification of the teaching staff involved in implementation of the *Medical massage* study programme study courses complies with the requirements of regulatory enactments and the strategic goals set by the college. 26 lecturers are involved in implementation of the study

programme, 9 of which are academic staff (elected LU PSK) and 17 invited lecturers. Two lecturers with a doctor's degree in medicine, 1 lecturer with a doctor’s degree in engineering, 1 lecturer with a doctor’s degree in pedagogy, 1 lecturer with a doctor’s degree in physics, 1 lecturer with a doctor’s degree in biology. 18 lecturers with master’s degree and 2 lecturers with a bachelor’s degree.

The qualifications acquired by the teaching staff play a very important role in enabling students to acquire a wide range of knowledge and versatile skills and to develop professional competencies under the guidance of lecturers. The majority of lecturers are professionals in medical and radiology fields, who specialize in their respective professional field and have worked for a long time, or work in related professions, thus ensuring the quality of the study results to be achieved. In addition, the teaching staff involved in the implementation of the study program has a higher pedagogical education, a master's or doctoral degree in educational science, allowing to ensure the link between practice and science, and the involvement of students in research.

The teaching staff helps students to achieve the required learning outcomes by constantly maintaining their own professionalism, and applying the acquired knowledge and new experience in the implementation of study courses, such as Dr. Biol., Lecturer Ainārs Bajinskis, by participating in the regular webinars organized by the European Federation of Radiographers' Associations (EFRS) in the field of education HENRE, gained experience is shared in the study course: Environmental protection, radiation safety and dosimetry, medical equipment in radiology - listening to topics on radiation safety and dosimetry: VVD Radiation Safety Center. Online seminar on current issues in the field of radiation safety; EuroSafe Imaging, webinar. Ask EuroSafe Imaging webinar: Dose saving options in lung CT; Federation of European Radiographers' Associations EFRS, webinar. Explaining radiation benefits and risks to patients in CT; Federation of European Radiographers' Associations EFRS, webinar. Practical steps in dose optimization in CT; British Institute of Radiology BIR, webinar. Guidance on using shielding on patients for diagnostic radiology applications; European Federation of Organizations For Medical Physics EFOMP, webinar. Risk Assessment for Mobile Radiography Outside ICU; Federation of European Radiographers' Associations EFRS, webinar. Innovations in dose optimization in CT; Federation of European Radiographers' Associations EFRS, webinar. Radiation Protection in CT; The International Atomic Energy Agency IAEA, webinar. Patient Radiation Management in Interventional Fluoroscopy. In the study course Quality Assurance and Control in Radiography - Image Quality Optimization in Imaging: The International Atomic Energy Agency IAEA, webinar. Optimizing quality, safety and precision in medical imaging.

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.

Table 3.7.

Number of teaching staff involved in realization of the study programme

Post	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021
Associate professor	2	2	2	2	2	2	3	5

Lecturers	8	9	9	11	9	9	8	4
Assistants	-	-	-	-	-	-	-	-
Teachers	14	13	16	20	19	16	16	17
Altogether	24	24	27	33	30	27	27	26

During the reporting period, significant changes have been observed in the composition of the teaching staff implementing the study courses in the Radiographer programme. *(table 3.7.)*.

- The number of elected docents in the academic staff has increased from 2 to 3 starting academic year 2019/2020, from 3 to 5, starting academic year 2020/2021. Lecturers with a doctor's degree in medicine, for example, J. Pupure, M. Radziņa, docent with a doctor's degree in pedagogy, for example, M. Saulīte, docent with a degree in biology, for example, A. Bajinskis, candidates for a doctor's degree, for example, M. Epermane, N. Ezīte un A. Veiss, S. Pavlovičs, A. Koha are involved in realization of the programme. These lecturers have the necessary knowledge and skills in research, which allows students to develop research skills within the study course.
- The number of lecturers in the reporting period, on average 9, starting academic year 2019/2020 has decreased to 8 and 2020/2021 from 8 to 4, due to the fact that 2 lecturers were elected docents.
- It is difficult to ensure the predominance of elected lecturers, because realization of study courses which promote faster implementation of various innovations in the development of the program requires attracting radiologists and radiographers employed in the field.
- During the reporting period, the average number of attracted lecturers remained on average 16 docents. Compared to 2013/2014 the number of invited lecturers has significantly increased 14 to 20 in academic year 2016/2017, henceforth remaining unchanged 16 attracted lecturers. The percentage of teaching staff involved in the study programme - the academic staff vs the invited lecturers in /2021 is as follows - 35% are academic staff and 65% are guest lecturers. This percentage remains throughout the reporting period, because it is important to involve specialists working in this field in the implementation of study courses, it provides students with knowledge and skills in the relevant field.
- The Radiographer programme is a professional programme, therefore in implementation of study courses, such as Radiological Imaging I, II; Systems radiography I, II; Radiography in pediatrics is important to involve professionals who practice in this field.
- Risks that may affect the quality of study process are the involvement of teachers. Risks are related, firstly, to the large workload of these specialists in healthcare institutions, and secondly, uncompetitive remuneration. The College needs to find motivating factors for attracting these faculty to ensure the long-term stability of the program.

One of the ways to attract teachers is to give them an opportunity to engage in pedagogical work, so that they can realize their intentions while studying in doctoral programs, for example, A. Weiss, M. Epermane, S. Pavlovičs, N. Ezīte.

In realization of the "Radiographer" study programme basic courses 41 CP (61,5 ECTS) or 48% are implemented by the academic staff of the college and 45 CP (67,5 ECTS) or 52% by invited lecturers (excluding free choice study courses, qualification work management).

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 main collaboration partners are professional associations: Latvian Association of Radiographers and Radiologist Assistants; Latvian Association of Radiologists; Lithuanian Association of Radiographic Technicians; Estonian Radiographers Association; EFRS (Federation of European Radiographers' Associations); ISRRT (World Association of Radiographers and Radiological Technicians); HENRE (European Organization for Higher Education in Radiography); Pauls Stradins Clinical University Hospital; Riga East Clinical University Clinic; Children's University Clinical Hospital.

Taking into account the suggestions and recommendations of employers, the study courses are being updated and interconnected.

To make objective decisions in solving topical issues in the development of study programme strategy, the Study Programme Council has been established. The head of said council is the head of the MT department, the members of the commission are academic staff and one student.

In the academic year 2020/2021 the number of students per study year in the programme is 79, the number of teaching staff is 26, which is 3 students per 1 teaching staff.

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_45_Sample_Of_The_Diploma_To_Be_Issued_In_The_Study_Program_Radiographer.pdf	45_P_Studiju_Programmas_Radiologa_Asistents_Izsniedzamā_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	ANNEX_46_Statistics_On_Students_In_The_Reporting_Periodi_In_The_Study_Programm_Radiographer.pdf	46_P_Statistika_Par_Studējošajiem_Studiju_Programmā_Radiologa_Asistents.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_47_Compliance_Of_The_Study_Program_Radiographer_With_The_Statel_Education_Standard.pdf	47_P_Studiju_Programmas_Radiologa_Asistents_Atbilstība_Valsts_Izglītības_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)	ANNEX_48_Compliance_Of_Professional_Aualification_Attained_In_Radiographer_Study_Programme_With_Professional_Standard.pdf	48_P_Studiju_Programmas_Radiologa_Asistents_Kvalifikācijas_Atbilstība_Profesijas_Standartam.pdf
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)	Compliance_Radiographer_Study_Programme_With_Industry-specific_Regulations.pdf	Studiju_Programmas_Radiologa_Asistents_Atbilstība_Nozares_Specifiskajam_Normatīvajam_Regulējumam.pdf
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	ANNEX_49_Mapping_Of_Study_Courses_For_Achieving_The_Study_Results_Of_The_Study_Program_Radiographer.pdf	49_P_Studiju_Programmas_Radiologa_Asistents_Studiju_Kursu_Kartējums.pdf
The curriculum of the study programme (for each type and form of the implementation of the study programme)	ANNEX_50_Study_Plan_Of_Study_Program_Radiographer.pdf	50_P_Studiju_Programmas_Radiologu_Asistents_Studiju_Plāns.pdf
Descriptions of the study courses/ modules	ANNEX_51_Descriptions_Of_Study_Courses_In_Study_Program_Radiographer.pdf	51_P_Studiju_Programmas_Radiologa_Asistents_Studiju_Kursu_Apraksti.pdf
Description of the organisation of the internship of the students (if applicable)	ANNEX_52_Study_Programs_Radiographer_Student_Practice_Organizations_Description.pdf	52_P_Studiju_Programmas_Radiologa_Asistents_Studējošo_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)		

Medicine (41721)

Study field	*Health Care*
ProcedureStudyProgram.Name	*Medicine*
Education classification code	*41721*
Type of the study programme	*First level professional higher education study programme*
Name of the study programme director	*Janeta*
Surname of the study programme director	*Strazdiņa*
E-mail of the study programme director	*Janeta.Strazdina@lupsk.edu.lv*
Title of the study programme director	*Mg.sc.sal.*
Phone of the study programme director	*+371 26319584*
Goal of the study programme	*To prepare highly qualified first-level professional higher education physician assistants, providing theoretical knowledge and acquisition of professional skills in accordance with current industry trends for independent and responsible medical activity at all levels of public health care, in accordance with Latvian labour market requirements and Latvian economic situation.*
Tasks of the study programme	*1.To ensure the acquisition of the first level professional higher education program in accordance with the "Regulations on the State Standard of the First Level Professional Higher Education" specified by the Cabinet of Ministers and to obtain the fourth level professional qualification of a medical assistant;* *2.To acquire theoretical branches of science and professional skills in accordance with the competencies of a medical assistant, in accordance with professional standards and labor market requirements, creating an independent and responsible specialist in the field, motivating for further professional development and education;* *3.To acquire knowledge about a healthy and sick person, at different ages and in emergency situations in the pre-hospital stage, in accordance with professional standards and labor market requirements;* *4.To acquire basic clinical skills, application of technologies, diagnostics and differential diagnostic methods, treatment and prevention within the framework of professional competence;* *5.To develop students' understanding of professional ethics, basic social skills in communication, research work in the field, and the multifunctional role of teamwork;* *6. To know the regulatory enactments and documents regulating the professional activities of medical assistants, ensuring the protection of patients' data and the principles of confidentiality of information.*

Results of the study programme	*Knowledge:* *1. Understands the etiology, pathogenesis, clinics, diagnostics, differential diagnosis, diagnosis, treatment provision and prevention of diseases, trauma and pathological conditions in the care of patients of different ages at all levels of care;* *2. Understands the provision of emergency medical care, including emergency and disaster management, and knows the principles of cooperation with other operational services;* *3. Understands the basic principles of the performance of clinical procedures and their role in the treatment, maintenance and preservation of patients' health, in connection with the basic principles of infection control, safe working environment and labor protection;* *4. Understands the assessment of a woman's health condition, diagnosis of pregnancy and its disorders, provision of necessary treatment, childbirth assistance in critical situations;* *5. Explains the importance of pedagogical principles in the education of patients, their relatives and the care team, based on the basics of communication and psychology, the principles of professional ethics;* *6. Understands the basic principles of the organization and economy of the health care system, the legal aspects of professional activity, including the principles of personal data protection and confidentiality of information, and the importance of scientific research in the field.* *Skills* *7. Provides care, education and treatment for patients that meet the physiological, mental and social needs of individuals of all ages at the primary, secondary and tertiary levels of health care;* *8. Carries out general examinations of patients of all age groups, applying express diagnostic and physical examination methods, diagnosing health disorders, determining and performing the necessary treatment, using medical terminology, foreign languages and appropriate documentation;* *9. Provides medical care, including the prescribing of medicines in accordance with the patient's age group, the established diagnosis and life-threatening conditions;* *10. Provides emergency medical care to patients of all ages in situations where there is a risk to health and life, in accordance with guidelines and methodological recommendations, using defibrillation and ensuring airway permeability, following a set of anti-epidemic measures, preventing self- and team-related hazards;* *11. Provides prenatal care for pregnant women, mothers, including births, and newborn care;* *12. Collaborates with professionals from other fields, organizes and plans its work, understanding the functions of medical institutions, the rights and obligations of patients and staff, observing the principles of personal data protection and confidentiality of information, engaging in scientific research.* *Competences* *13. Performs examination of patients of all age groups, determines the state of health and diagnosis of disorders, including establishing the death of the patient, evaluating treatment tactics, independently prescribing medical preparations;* *14. Provides emergency medical care to patients with non-critical and critical injuries in accordance with algorithms, guidelines and recommendations in the pre-hospital phase and in the admission departments of medical institutions (emergency medical care), using the necessary medical technologies;* *15. In co-operation with a doctor, provides continuous medical care to patients at all levels of care, educating patients and members of the public about the preservation, maintenance and rehabilitation of health, using medical terminology and foreign languages, respecting the protection of personal data and information confidentiality;* *16. Assesses the health condition of a woman during pregnancy, diagnose disorders of her course, performs the necessary examination and provide emergency medical assistance, in the pre-hospital stage, independently accepting childbirth and performing primary care of the newborn;* *17. Is able to think critically and solve problems in the conditions of physical and psycho-emotional load, organizing and managing his / her and his / her colleagues' work, ensuring a safe working environment, observing the requirements of hygiene and anti-epidemic regime and work safety;* *18. Participates in the development of scientific research works, improves himself / herself by improving professional skills in the field.*
Final examination upon the completion of the study programme	*Qualification paper and an integrated examination*

Study programme forms

Full time studies - 3 years - latvian

Study type and form	*Full time studies*
Duration in full years	*3*
Duration in month	*0*
Language	*latvian*
Amount (CP)	*120*
Admission requirements (in English)	*General or vocational secondary education*
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	*Doctor’s assistant (paramedic)*

Places of implementation

Place name	City	Address
P.Stradins Medical College of the University of Latvia	JŪRMALA	VIDUS PROSPEKTS 38, JŪRMALA, LV-2010
Rēzekne branch of P.Stradins Medical College of the University of Latvia	RĒZEKNE	N. RANCĀNA IELA 23A, RĒZEKNE, LV-4601

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 goal of the Medicine study programme, since the previous accreditation, has been expanded based on the professional development of the field and current trends in health care.

The tasks of the Medicine study programme have been expanded on the basis of the professional standard of Medical Assistants (paramedic), as well as the requirements of regulatory enactments and legislation established in connection with the provision of quality health care services.

The results to be achieved in the Medicine study programme define knowledge, skills and competencies that reflect the suitability of highly qualified specialists for the profession required in the Latvian labor market.

The examination at the end of the Medicine study programme has been changed since the previous accreditation. Starting academic year 2014/2015 the final examination consists of a presentation of the qualification paper and an integrated examination, which increases the qualitative reflection of the acquired theoretical knowledge and practical skills.

No changes are planned within the study procedure evaluation procedure.

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 first level professional higher education Medicine study programme has been established in accordance with the Law on Higher Education Institutions, Cabinet of Ministers Regulation No. 141 of March 20, 2001, Regulations on the State First Level Professional Higher Education Standard, the Classification of Professions of the Republic of Latvia and LU PSK internal regulatory enactments.

The tasks of the study programme are aimed at achieving the defined goals and ensuring the study results. The expected results of the study programme are formulated on the basis of the knowledge, skills and competencies defined in the Latvian qualification framework in accordance with the 4th qualification level and the requirements included in the professional standard.

Upon graduation of the study programme, the student obtains a diploma of first level professional higher education and the qualification of Doctor’s Assistant (paramedic). The awarded qualification

envisages the acquisition of the necessary knowledge, skills and competencies provided by the content of the study program. For example, the professional standard mentions several tasks - to determine, monitor, record and interpret the data of the patient's vital functions, as well as to document, record the electrocardiogram and evaluate its result, perform clinical procedures, etc., the necessary knowledge and skills are included in the content of the study programme and correspond to the title of the Medicine study programme.

Duration of the study programme, 3 years, is closely related to the skills, professional knowledge and competencies specified in the professional standard. The specified duration of studies allows to achieve the set goal of the study programme and acquires the necessary skills for performing professional activities.

Admission requirements are set out in the LU PSK Admission Regulations and are based on the requirements of regulatory enactments. An applicant who has successful assessments in a document certifying secondary education, which confirms knowledge of the state language and a foreign language (eg, successfully passing centralized examinations) is able to study in the first level higher professional education programme. Reflectants preparation at the previous level of education, motivation to obtain professional education and organization of the study process are able to ensure the achievement of study results.

According to the education classification code of the Republic of Latvia, the code of a Doctor’s assistant (paramedic) is 41721, where the first two digits correspond to the second qualification level - the first level professional higher education, to be implemented after obtaining general or professional secondary education. Duration of full-time studies is two years. The other three digits of the code identify the corresponding education thematic group (health and social welfare), the education thematic area (health) and the curriculum group (treatment).

The study program corresponds to the level of 5 Latvian Qualifications Framework, which determines the relevant knowledge, skills and competencies.

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

Observing the tendencies of recent years, with more and more emphasis laid on the need for new specialists in the medical field in Latvia, LU PSK statistics also show that the number of students wishing to study in the Medicine study programme continues to grow and thus provide social and economic contribution to the labor market, including also for Latgale region.

When choosing to study in the Medicine study programme, students are often specialists already working in the field, who want to increase their position in the labor market by acquiring the profession of Doctor’s Assistant (paramedics), thus supplementing the number of health care professionals, also in Latgale region.

It should also be noted that the majority of students, already in the 2nd and 3rd study year, in parallel with the study process, start work in their chosen field in order to acquire professional skills, abilities and strengthen theoretical knowledge, thus obtaining a qualification would be suitable for health care professionals in demand in the labor market, not only in Jurmala, but also in Rēzekne branch.

Based on the statistics of the LU PSK on the employment of graduates in Jūrmala, it should be noted

that in the reporting period, every year the majority of graduates (70 - 88%) choose to work in the acquired specialty immediately after obtaining the qualification. On the other hand, analyzing the data on the employment of graduates in the reporting period in the Rezekne branch, it must be concluded that they are variable, however, most of them work in the profession after obtaining the qualification (76 - 90%).

Thus, it can be concluded that this is positive dynamics, because every year the college improves the socio-economic contribution to the Latvian labor market with qualified health care specialists – Doctor's Assistants (paramedics) who are employed in public sector medical institutions as well as in the provision of outpatient services in the private sector.

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.

Analyzing statistical data for the time period from 2013/2014 until 2020/2021, it can be concluded that the number of students is variable. This year has seen a significant increase in the total number of students, as well as the number of matriculated students by 50%, which can be related to the industry's professional assessment in maintaining and maintaining public health, recognition of the profession and demand for specialists in the Latvian labor market and globalization of health care.

Analyzing the data on student drop-out in the reporting period, there is a tendency that this drop-out occurred in the first study year (Table 3.1). Most often, in 88% of cases, studies are not continued due to personal reasons, while in 12% of cases dropout is related to non-timely fulfillment of various study requirements (see Annex 22).

The Medicine study programme is implemented in the official language and funding is provided from the state budget.

Table 3.1.

Statistical data on students of the *Medicine* study programme of the college

	Number of students in the programme	**Number of students matriculated of the programme**	**Number of graduates of the programme**	**Number of dropouts of the programme**		
				Year 1	Year 2	Year 3
2013/2014	96	50	25	9	3	1
2014/2015	85	42	17	16	9	-
2015/2016	81	32	29	9	1	-
2016/2017	69	32	17	10	4	-
2017/2018	69	37	18	12	-	-
2018/2019	76	46	21	18	2	-
2019/2020	69	31	15	12	5	-
2020/2021	104	63	-	16	-	1

Analyzing statistical data in the branch in the period from study year 2013/2014 until 2020/2021 (Table 3.2), it can be concluded that the number of students in dynamics has a positive tendency to gradually increase. A particularly rapid increase is observed in this academic year, when the total number of students has increased by 40%, which can be justified by the development of the labor market infrastructure in Latgale region, because in this region, after obtaining a qualification, students attain stability and social security. A significant increase in the number of students is justified by the socio-economic aspect that the opportunity to study is provided closer to the place of residence. Every year there is also an interest in joining studies in the later stages, students return to college to study other study-related study programmes. Their implementation is based on the procedure for starting studies at the LU PSK in later study stages, as it is possible to recognize certain study courses acquired in other educational institutions with a credit transfer system.

With the proportional increase in the total number of students, an increase in student drop-out is also observed in the reporting period. This dropout is mainly marked in the first year of studies. Most often, in 79% of cases, the reasons for dropping out of studies are mentioned: personal circumstances, incompatibility of individual goals and difficulties in combining studies with work. The second part of the student drop-out, which makes up 21%, consists of those students who have not fulfilled the set study requirements in the study process. It should be noted that a positive aspect is observed in the dropout data of the third study year, in the reporting period only 2019/2020. in the academic study year 2 students have stopped their studies due to personal reasons, this can be explained by the fact that students are motivated to achieve their goal and obtain the qualification of a medical assistant (see Appendix 22).

The implementation of Medicine study programme in the branch takes place in the state language and funding is provided from the state budget.

Table 3.2.

Statistical data on students of the *Medicine* study programme of the college branch

	Number of students in the programme	**Number of students matriculated of the programme**	**Number of graduates of the programme**	**Number of dropouts of the programme**		
				Year 1	Year 2	Year 3
2013/2014	64	38	15	9	2	-
2014/2015	60	39	13	9	1	-
2015/2016	64	26	23	9	2	-
2016/2017	59	36	19	12	-	-
2017/2018	71	46	9	17	-	-
2018/2019	74	34	20	12	1	-
2019/2020	84	42	23	11	-	2
2020/2021	118	69	-	28	1	-

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.

First level professional higher education *Medicine* study programme was established in accordance with the *Law on Higher Education Institutions*, and Cabinet of Ministers' regulations #141 of March 20, 2001 on the *State First Level Professional Higher Education Standard, Professional Standard*, as well as internal regulatory enactments of LU PSK. The *Medicine* study programme is implemented at the Department of Medicine of LU PSK

Studies are realized in a full-time format, over a period of 3 years. Scope of study programme is 120 CP or 180 ECTS *(table 3.3.).*

Table 3.3.

Structure of the *Medicine* study programme

Number.	**Study courses**	**Type of study courses**	**Study programme 120 CP** (180 ECTS)
1.	General education study courses with the included 6 CP (9 ECTS) module for development of business professional competencies	A	**21 CP** (31,5 ECTS)
2.	Branch specific study courses		**69 CP** (103,5 ECTS)
2.1.	Compulsory study courses	A	*49 CP*
2.2.	Compulsory choice courses – vocational courses	B	*16 CP*
2.3	Free choice	C	*4 CP*
4.	Practice	A	**22 CP** (33 ECTS)
5.	Qualification work	A	**8 CP** (12 ECTS)

Content of study courses is designed in such a way as to ensure successive acquisition of knowledge in optional study courses, by supplementing in-depth understanding of the knowledge acquired in basic study course.

Information included in study courses is interrelated with the goals and tasks of the study courses, which are subordinated to the goal of the study programme and the result to be achieved - knowledge, skills and competences.

Descriptions of study courses are developed by the lecturer, stated as the author of the course description. Teaching staff cooperates in development of study results, content, description of independent work and evaluation of results to promote achievement of results of the study

programme. When preparing the description of the study course and formulating the results to be achieved, the lecturer focuses both on achieving the goal of the course and on ensuring results of the programme.

Director of the study programme checks, whether results of study courses to be achieved comply with study results of the study programme by performing mapping (annex 18), which reflects interrelation of the goals.

The study course is updated regularly, in accordance with the LU PSK *Study Course Description Development Procedure*. Teaching staff involved in realization of the study programme evaluates not only the content of the study courses, but also the content of independent work and evaluation methods, in order to prepare highly qualified, responsible and independent social caregivers in accordance with new tendencies of the field, science and labor market requirements. To ensure unity of theory and practice, majority of lecturers are social work specialists, as well as several practicing specialists in the field. Lecturers participate in education of students both in Jūrmala and in the Rēzekne branch, thus providing students with knowledge and practical skills related to current events in the industry. For example, when developing and improving the practices included in the study process, the collected data of the employer survey and recommendations on the assessment of students during clinical practice are taken into account. Based on the survey, starting in 2019/2020. The internship of the study year in the specialty is supplemented with 2 CP, thus ensuring the acquisition of practical skills in the clinical environment. While updating the content of the study courses, students are additionally offered specialized elective study courses “Monitoring of patients in prehospital stage” and “Electrocardiography in the diagnosis of urgent conditions”, which are provided by certified lecturers working in the field.

Newest trends from the field are obtained in cooperation with employers, professional associations and unions. Compliance with the requirements of science is ensured by the participation of the teaching staff of the study program in scientific conferences and preparation of reports on research activities. With development of a qualification paper, students get involved in scientific research processes.

In cooperation with the Latvian Association of Outpatient Medical Assistants and the Association of Emergency Medicine of the Republic of Latvia and analyzing topicality of the labor market, it can be concluded that nowadays there is a demand for specialists who, in addition to specialized knowledge, are also proficient in other important areas related to the profession, such as record keeping and labor protection, business, financial accounting and pedagogy. When surveying employers, it can be concluded that currently those working in the industry also need skills such as the ability to analyze, think critically and argue. Theoretical knowledge study courses included in the study programme - practice in clinical environment and the development of a qualification paper- are aimed at developing of these skills.

During studies, students acquire the necessary knowledge and skills in accordance with requirements defined in professional standard. This is also confirmed by students' questionnaire and positive evaluations submitted by the employers, as well as evaluation of graduates and their employment in the profession. On average, the employment of college graduates is 89%.

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 first level professional higher education Medicine study programme is implemented at the Department of Medicine of the P.Stradins Medical College of the University of Latvia and the Rezekne branch of the P.Stradins Medical College of the University of Latvia.

Study process of the Medicine study programme is organized in college auditoriums, pre-clinical simulation rooms, computer room and laboratories. Study practices included in the study programme are organized in cooperation with medical institutions and the emergency medical assistance service.

At the end of the study programme, a qualification exam is taken, which includes a presentation of the developed qualification paper and an integrated exam.

The study process is implemented by the academic staff of the college, the activities of which are coordinated by the head of the Department of Medicine. To improve the methodological base of the study programme, there is a study programme council, which involves lecturers with the aim to improve study course programmes, ensuring the development of appropriate study course teaching methodology, based on study-centered teaching principles, improving and updating teaching literature by engaging in research activities. The operation of the Study Programme Council is determined by the Regulations of the Study Programme Council of the University of Latvia.

The Medicine study programme takes into account principles of student-centered teaching and learning, which allows to ensure the achieved result - knowledge, skills and competencies. Implementation of study courses in Jūrmala and Rēzekne branch is ensured in accordance with the descriptions of study courses, which define the course evaluation system, which is unified with the unified evaluation system of LU PSK. The evaluation system used by LU PSK is based on the Cabinet of Ministers Regulations No. 141 of March 20, 2001 *Regulations on the State Standard of First Level Professional Higher Education*.

The basic forms of examination of the Medicine study programme are a test or examination, which must be taken at the end of each study course, and its form is specified in the description of the study course. The study process also uses such methods as tests, demonstration of skills and abilities, evaluation of practical activities, solving situation tasks, etc.

During the study course students are introduced to the expected result of the test and the methodology of analysis of the results. After the test, students receive an explanation of the assessment. According to the regulations, the lecturers note the assessment in the final minutes of the tests and exams. After the final examination of the respective study course or the end of the

academic year, the results of student evaluation and methods are discussed in the Study Programme Council, which serve as a basis for improvement of the study process. In cases when a student is dissatisfied with his/her assessment, according to the LU PSK study course examination procedure, the student has a right to challenge the lecturer's assessment within one week after announcing the examination results by submitting an appeal to the department, which is considered by the study programme council. . The academic and administrative staff monitors the requirements and results of students' knowledge assessment.

When providing and promoting a student-centered educational programme, teaching methods such as lectures, seminars, practical work, group work, independent work are used in its practical implementation (Table 3.4). The choice of the study form is determined by the aim and content of the study course.

Table 3.4.

Percentage proportions of study implementation methods

Method of implementation	1st year of studies 1st and 2nd semester	2nd year of studies 3rd and 4th semester	3rd year of studies 5th semester
Lectures	37%	40%	38%
Seminars	20%	6%	6%
Practical classes	19%	30%	34%
Independent work	24%	24%	22%

Lectures as a form of study implementation are used for acquisition of theoretical knowledge in general education, branch and professional specialization study courses, and make up the majority of all study implementation methods, which in the third study year are almost equal to the number of practical classes (Table 3.4). The number of practical classes increases proportionally with each study year, which is related to the fact that theoretical knowledge must be strengthened and improved with the principles of study-centered teaching and learning in professional study courses. The quality of these study courses for study-centered teaching is ensured by the implementation of practical classes in small groups of students, which consist of 5 - 8 students, and the duration of practical classes from 3 - 6 academic hours. The method of simulation and modeling of clinical situations in practical classes using mock-ups and medical equipment, such as modulated emergency situations - anaphylactic shock, cardiopulmonary resuscitation algorithms, arrhythmias, defibrillation, allows to strengthen the acquired skills and abilities found in real practice in the Doctors assistant (paramedic) professional life. The course of practical classes in a simulated environment contributes to the successful achievement of the goals and results of the branch study courses.

Seminars are a supplement to theoretical and practical knowledge of any topical issues in a particular course of study. The method of seminar implementation is implemented in groups of 10 - 15 students. Students analyze, compare and evaluate an independently researched topic, giving a lecture, expressing understanding and reasoned opinion, developing logical and critical thinking, using medical terminology. The problem-solving method and the clinical situation analysis method are used in those study courses in which students need to develop an understanding of real situations in health care. The aim of independent work is to get acquainted with the topical issues of the study course. The student learns to obtain information, summarize and analyze it, improving the skills of scientific research and linking the acquired theoretical knowledge with practice. Proportionally, this method of study implementation is minimally variable in all five semesters.

In some study courses, one of the forms of study course skills acquisition is group work, which not

only strengthens the topics learned in lectures and seminars, but also develops teamwork skills and cooperation skills, which play an important role in multifunctionality in professional activities.

In the second year of studies, the student develops a course paper - Academic History, working with a specific patient during clinical practice, which promotes and develops student-centered learning. The aim of development of the academic history is to strengthen the theoretical knowledge and practical skills in the collection of patients' anamnesis, assessment of the patient's objective condition, formulation of the diagnosis and differential diagnosis. Presentation of the course paper takes place in the spring session (4th semester) and lecturers of clinical disciplines are involved in the evaluation.

At the end of the Medicine study programme, the student must pass a qualification exam, which consists of two parts - development and presentation of a qualification paper, and an integrated exam, which is assessed in a 10-point system. The directions of qualification works are discussed in the Study Programme Council. Development of a qualification paper develops the student's skills in independent and research work. The student develops a qualification paper under the guidance of a lecturer.

The form of the integrated examination has changed during the reporting period. The form of the previous exam - the test did not give students an opportunity to substantiate their theoretical knowledge and explain the actions taken. Starting 2017/2018 the integrated examination of the academic years consists of four sections - internal therapy, surgery and pediatrics, emergency medical care and specialized disciplines (infectious diseases, neurology, toxicology, eye diseases, ENT, psychiatry, obstetrics and gynecology, oncology). To test knowledge and assess clinical thinking, situation tasks have been developed, which the student answers orally and demonstrates skills in providing emergency care on the moulage. Students have a right to get acquainted with the list of topics included in the integrated examination four months before the examination takes place.

The organization and content of the qualification examination is regulated by the internal normative documents of the college.

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 practice of the Medicine study programme is organized in accordance with the Cabinet of Ministers *Regulations No. 141 on the State First Level Professional Higher Education Standard* of March 20, 2001. The internship is regulated by the LU PSK internship regulations and the tripartite internship agreement between the college, the student and the internship place. The total volume of practice is 22 CP (33 ECTS) (Table 2.3). The amount of practice credit points has changed from 2019/2020. academic year, increasing the number of internships - “Internship in the specialty” by 2 CP (3 ECTS).

Table 3.5.

Depiction of the total volume of practice

No	Title of the practice part	CP/ ECTS	Time of implementation
1.	**Professional technical skills**	**4 KCP** (6 ECTS)	First year of studies
2.	**Practice in speciality**	**6CP** (9 ECTS)	Second year of studies
3.	**Qualification practice –** emergency medical care and intensive therapy or primary healthcare.	**12CP** (18 ECTS)	Third year of studies

The internship programme is an integral part of the study programme and is organized on the basis of the study programme goals.

A programme has been developed for the internship in accordance with the LU PSK Student Internship Organization Procedure and the Medical Assistant Professional Standard, which the student and the internship supervisor get acquainted with. Before the start of the internship, students are introduced to the internship supervisor, the internship programme and the tasks to be performed during it.

The student is free to attend a place of internship of his/her own choosing, or the program administration provides support in finding an internship place. Parts of practice - The aim of professional technical skills is to strengthen knowledge and develop skills in performing procedures, while the aim of the practice is to strengthen the acquired theoretical and practical knowledge in assessing the patient's health, diagnosing disorders and differential diagnosis, and elderly patients. The aim of qualification practice is to strengthen the student's skills and abilities in the specialty. Simultaneously with the employers, the improvement of the study programme is evaluated. In the first and second year of studies, students do internships in clinics, including hospital admission departments. In the third study year, the internship is organized in cooperation with the internships of the Emergency Medical Service and family doctors. All internship tasks are performed by the student under the supervision of the internship supervisor.

During the second internship, the student also develops an independent work - Academic History. The aim of the development of the academic history is to strengthen the theoretical knowledge and practical skills in the collection of patients' anamnesis, assessment of the patient's objective condition, formulation of the diagnosis and differential diagnosis. The presentation of the course paper is planned for the summer session (4th semester) and lecturers of clinical disciplines are involved in the evaluation.

The evaluation of the practice is performed in accordance with the *Practice Regulations of the University of Latvia P. Stradiņš Medical College* and the *Practice Programme*. After the end of the practice, the student submits the practice diary and the practice description to the department within a certain period of time. Practice evaluations are made in a 10-point system (practice in the specialty, qualification practice) or with a pass / fail, which consists of the evaluation of the practice diary and the description of the practice place.

The connection of students' practice tasks with the study results to be achieved in the study programme is shown in table 3.6.

Table 3.6.

Linking tasks of the *Medicine* study programme practice with the results of the study programme

Results of the study programme	1.	2.	3.	4.	5.	6.	7.
Tasks of study practices	Cooperates with professionals from other fields, organizes and plans his/her work, understanding the functions of medical institutions, the rights and obligations of patients and staff, observing the principles of personal data protection and confidentiality of information.	Performs examinations of patients of all ages, assessment of health status and diagnosis of disorders, determining diagnosis and treatment, using the necessary equipment, documentation and medical terminology.	Performs clinical procedures in accordance with procedural standards, understands their role in the treatment of patients, educates and prepares patients of different profiles and ages for medical, surgical, differential diagnostic and laboratory examination manipulations.	Provides medical care by choosing the type and dose of medication administration, according to the age group, including prescribing medication for the specified diagnosis and life-threatening conditions.	Assess the woman's state of health during pregnancy, diagnose her disorders, perform the necessary examinations and provide emergency medical care, in the pre-hospital stage, independently accepting childbirth and providing primary care for the new-born.	Provides emergency medical care in accordance with guidelines and algorithms, including emergency and disaster management, in conditions of physical and psycho-emotional stress, in cooperation with other operational services.	In communication with patients, their relatives, specialists in the field, the basic principles of professional ethics, morality and behaviour of a physician's assistant shall be observed.
To get acquainted with the place of practice, goals, tasks and principles of operation	+						
To observe the law of protection of patients' rights, confidentiality, internal rules of the medical institution, work safety	+	+	+	+	+		+
To get acquainted with the documentation,		+	+	+	+	+	
To be able to plan their work, maintain the cleanliness of the work environment, use personal protective equipment,		+	+		+		+
To get acquainted with the use of patient treatment methods and principles in different age groups			+	+	+	+	
To get acquainted with the types of provision of medical care - i / m, i / v, s / c, etc., antibacterial therapy, heparin, insulin administration, etc., for patients of different profiles and ages, including children, in different age groups, assessing the patient's response to medication administration			+	+			
To get acquainted, participate in planning for the therapeutic treatment of patients of various profiles and ages, including pediatric patients		+	+	+			+
To get acquainted with the preparation of patients of different ages for surgical treatment, surgical manipulations, postoperative care		+	+	+			+
To get acquainted with the health condition of a woman, the course of pregnancy, possible disorders					+		
To get acquainted with the course of childbirth, assessment of the newborn according to the Apgar score and primary care					+		
Get acquainted with the principles of providing emergency medical care	+					+	
Adhere to the norms of professional ethics, morality and conduct of the physician's assistant in communication with patients, their relatives and colleagues	+						+

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 *Medicine* study programme choose the topic of their qualification paper in accordance with the *Procedure for Development, Submission and Presentation of the Qualification Paper Developed* by the LU PSK. The student has an opportunity to offer a topic of his / her choosing based on his / her knowledge and professional skills. If necessary, the student can consult with the teaching staff of the programme about topicality of the theme.

Kvalifikāciju darbu tēmas izvēli nosaka:

- aktualitāte nozarē. Sadarbībā ar Neatliekamās medicīniskās palīdzības dienestu studentiem tiek piedāvātas pētījumu tēmas. Akadēmiskais personāls kopā ar nozares profesionāļiem apspriež un izvirza pētniecības tēmas;
- iekšējo zinātnisko projektu pētījumu virzieni;
- koledžas pētniecības stratēģija.

Qualification work must be related to professional qualifications, applied and practically applicable in a professional environment. After choosing the topic of the qualification paper, a supervisor of the qualification paper is appointed. After the presentation session of the qualification examination, head of the state final examination commission provides his/her assessment of the procedure and topics chosen by the students. Assessment of qualification papers in the *Medicine* study programme is seen in table *(table 3.7.)*.

Each year, students present their research topics at local and international conferences. Presented topicality in the field with themes - *Internal factors influencing the work organization of doctor's assistants in the Emergency Medical Assistance Service; Use of the intraosseous approach in the Emergency Medical Service*. Qualification papers developed during internal scientific projects are presented - *Influence of physical activity on changes in lipid composition for medical college students; Changes in the body composition of medical college students during their studies*. Works based on the college's research strategy - *Patient safety during medical care; Prevention of age-related osteoporosis-related disorders; Changes in cardiovascular dysfunction and total exercise tolerance in patients after myocardial infarction during rehabilitation; Back pain as an occupational disease among medical assistants in the Emergency Medical Service*.

Table 3.7.

Evaluation of qualification works of the *Medicine* study programme

Academic year	Evaluation in points							Number of graduates
	4 almost satisfactory	**5** satisfactory	**6** almost good	**7** good	**8** very good	**9** excellent	**10** with distinction	
2013/14	2	-	4	10	4	4	1	25
2014/15	-	1	2	5	6	3	-	17
2015/16	-	-	5	7	11	5	1	29
2016/17	-	-	3	4	6	2	2	17
2017/18	1	-	-	2	10	5	-	18
2018/19	1	2	3	3	3	7	2	21
2019/20	-	3	3	3	4	2	-	15
Number:	**4**	**6**	**20**	**34**	**44**	**28**	**6**	**142**

At the Rezekne branch of the LU PSL, students of the Medicine study programme develop qualification papers according to the uniform rules of the college. The topicality in the field is mostly studied in Latgale region and the topics of the college's strategy are studied in the local environment, it expands the boundaries and scope of the college's research in Latvia. Assessment of qualification papers for students in Rezekne branch *(3.8.tab.).*

Table 3.8.

Evaluation of qualification works of the *Medicine* study programme in the Rezekne branch

Academic year	Evaluation in points							Number of graduates
	4 almost satisfactory	**5** satisfactory	**6** almost good	**7** good	**8** very good	**9** excellent	**10** with distinction	
2013/14	-	-	-	5	5	1	4	15
2014/15	-	1	1	3	7	1	-	13
2015/16	-	1	3	7	4	6	2	23
2016/17	2	1	5	2	6	3	-	19
2017/18	-	-	-	5	-	4	-	9
2018/19	-	2	3	2	7	6	-	20
2019/20	-	1	4	5	8	4	1	23
Number:	**2**	**6**	**16**	**29**	**37**	**25**	**7**	**122**

Since the academic study year 2013/2014 264 doctor’s assistants have graduated from the LU PSK. Topics of the *Medicine* study programme qualification papers fully correspond to the content and requirements of the study programme, as well as the current issues of the modern labor market.

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 main source of funding for the *Medicine* study programme is state budget funding. Implementation of the study process takes place in Jūrmala and Rēzekne branch.

The study process in Jūrmala is realized in three buildings with 10 well-equipped lecture-rooms equipped with computer technologies and specialized teaching aids in accordance with the purpose of the lecture-room, 4 laboratories (microbiology, environmental medicine, hematology, biochemistry), 7 pre-clinical offices (care offices, emergency medical care office, pediatric care office).

The study process in Rēzekne branch is realized in well-equipped lecture-rooms, furnished with computer technologies and pre-clinical-care cabinets to ensure the process of practical classes in emergency medical care and acquisition of clinical procedures.

For implementation and development of the study programme, the LU PSK maintains and continuously improves the necessary study equipment and material and technical base, both in Jurmala and in the Rezekne branch.

Improving the acquisition of practical skills of the study course "Reaniamtion, intesive care" in 2013, the Laerdal cardiopulmonary mannequin, heart simulator HeartSim Link, was purchased. In order to improve the pre-clinic care room with appropriate equipment, a LINET universal bed with electric adjustment, a “Compact” perfuser, instrument tables, a vision test table with lighting were purchased in 2014, thus bringing the training process closer to clinical environment.

For the study course in Emergency Medicine I and II, in year 2015., the cabinet equipment was supplemented with 4 cardiopulmonary resuscitation mannequins (Mini Anne, Mega Code Kell and ALS Baby 200), Laerdal boards for spinal immobilization, cup stretcher MeBer, Tomas splints in 2015. In turn, 4 intravenous injection dummies, 2 intramuscular injection simulators, a hip anatomical model and an intramuscular injection simulator, 2 catheterization / enema dummies (female and male), 3 abdominal injection dummies and a diabetic injection dummy were purchased for clinical procedures.

Almost every year, the equipment for practical classes is renewed or improved, taking into account the rapid and dynamic development of technologies in medicine, in order to acquire the practical skills and abilities required in the industry for various situations. Also in 2020, the material and technical equipment was supplemented and renewed with the purchase of the intravenous injection simulator *Kyoto Kagaku*, 4-bed *Enterprise 8000X*, 5 interventional injection simulators *3B Scientific*. 2 patient care dummies NSG ANNE (S), injection dummies, 2 treatment tables for medication and equipment storage *AURION Compact*, 3 patient accessory tables with feeding board *Eleganza Classic, Linet*, 3 treatment tables with drawers *HYGIEN-O-STAR Type 34, Simpex Objekt* , functional patient transport trolley *SPRINT 100, Linet*, patient transport trolley *Gima*, patient transfer slider.

Medical goods, laboratory goods, disinfectants, accessories, raw materials, work materials and accessories were regularly purchased to ensure the successful operation of the study process.

In the period from 2015 to 2019, pre-clinical and treatment rooms are equipped with 55-inch monitors and computers with Internet connection to audio-visual display the manipulations to be performed in accordance with industry standards and thus supplement the learning process with cognitive manipulations.

All rooms of LU PSK are equipped according to their use, are technically well equipped - all classrooms are equipped with multimedia projectors, which are connected to computers for visualization of study material and internet connection, internet (wireless) connection is available in all buildings and rooms. In turn, the academic staff is provided with workplaces, computers for planning, organizing and controlling the study process, internet connection and equipment for printing the materials necessary for the organization of the study process for printers.

From the spring of 2020, the facilities provided by the Microsoft Office365 platform have been implemented at the University of Latvia. Academic staff and students have access to an interactive environment, in which it is possible to additionally organize the learning process, also using the interactive Microsoft TEAMS platform. In addition, the teaching staff has an additional opportunity to organize a distance learning process in five classrooms using network cameras and computers with an Internet connection.

Both in Jurmala and in Rēzekne branch every year, the computer equipment and software required for the study process is improved and supplemented.

In the information technology acquisition cabinet of LU PSK in Jūrmala, 18 workplaces have been created for students and 1 workstation for a lecturer equipped with a multimedia projector. Workplaces for students are arranged so that the teacher can follow the activities of each student at the same time. In the Rēzekne branch, 10 work places have been created for students in the same type of office.

All computers are connected to a global computer network, so the Internet is available on every computer. The interconnected computers are connected in a local area network, which provides access to the information of any computer.

The library provides students with study literature and periodicals in Latvian, English, German and Russian. The library has a collection of more than 10,300 items, of which 70% is medical literature, literature in psychology, pedagogy, social care, cultural history and philosophy is widely represented, reference books, dictionaries and various encyclopedias are available. In the library, lecturers and students have at their disposal workplaces equipped with 7 computer sets and Internet connection and 16 places in the reading room. There is an information base with an electronic catalog of books created in the library information system SCHOOL ALISE. Students have access to the *EBSCO* database for the development of research papers, the resources of which can be used both in person and remotely.

The material and technical provision of the Medicine study programme is versatile, modern and corresponds to the methods of study course implementation, which are based on study-centered teaching and learning forms in order to improve the study process and results.

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 financial resources of the College consist of three sources: funding of the Ministry of Education and Science of the Republic of Latvia for the implementation of study programmes, income from paid services and other income of the College, projects financed by European Union organizations and other international organizations. In the Medicine study programme, the main source of funding is the funding of the Ministry of Education and Science of the Republic of Latvia for the implementation of study programmes. The basic costs of the study place in the Medicine study programme, in Jurmala and Rezekne branch, budget financing per student is 1630.11 EUR. The real costs of the study programme per student, in Jurmala and Rezekne branch, are shown (Table 3.9). Funding for full-fledged implementation of the study programme is obtained from the college's income and projects financed by European Union organizations and other international organizations. The minimum number of students to ensure profitability of the study programme is 15.

Table 3.9.

Cost calculation of the Medicine study programme

Salary per one study place	Employer's compulsory state social insurance contributions per one study place per year	Cost of business trips and travel per one study place per year	Service costs per study place per year	Costs of materials, energy resources, water and inventory per study place per year	Cost of purchasing books and magazines per student per year	Equipment purchase and modernization costs per study place per year	**Cost per study place**
1334.05	314.7	58.18	548.14	219.56	7.99	49.75	**2532.37**

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.

Qualification of the teaching staff involved in implementation of the *Medicine* study programme study courses complies with the requirements of regulatory enactments and the strategic goals set by the college. 42 lecturers are involved in implementation of the study programme, 22 of which are academic staff (elected in LU PSK), 1 guest lecturer and 19 invited lecturers. 3 lecturers with a doctor's degree in medicine, 1 lecturer with a doctor's degree in management sciences, education management, 1 lecturer with a doctor's degree in engineering, 33 lecturers with master's degree and 1 lecturer with a bachelor's degree, as well as 1 lecturer with first level higher education, currently continuing studies in bachelor's programme participate in the implementation of the study programme.

Qualification of the teaching staff involved in implementation of the *Medicine* study programme study courses complies with the requirements of regulatory enactments and the strategic goals set by the college. 37 lecturers are involved in implementation of the study programme, 14 of which are academic staff (elected in LU PSK), 1 guest lecturer and 22 invited lecturers. 3 lecturers with a doctor's degree in medicine, 1 lecturer with a doctor's degree in engineering, 30 lecturers with master's degree and 1 lecturer with a bachelor's degree, as well as 1 lecturer with first level higher education, currently continuing studies in bachelor's programme participate in the implementation of the study programme.

A large part of the teaching staff involved in the implementation of the study program has long-term experience in the field or continues to work in the profession, it ensures the versatile and extensive acquisition of knowledge and skills of students, as well as ensures the achievement of expected results in the study program. By perfecting and improving the qualification of the teaching staff, the study course provides students with current innovations in the field. For example, in the study course "Emergency medicine I, II" the lecturer has regularly participated in international continuing education events, where the latest guidelines and algorithms for cardiopulmonary resuscitation have been mastered, providing emergency medical care to patients of different ages. The refresher course took place in Krakow (Poland) in 2016. "ALS (Advanced Life Support) Provider Course, European Resuscitation Council"; 2017 ITLS (International Trauma Life Support) Advanced Provider Course, 2018 EPALS (Europeana Pediatric Life Support).

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.

Table 3.10.

Number of teaching staff involved in realization of *Medicine* study programme

Post	2013./2014.	2014./2105.	2015./2016.	2016./2017.	2017./2018.	2018./2019.	2019./2020.	2020./2021.
Associate professor	4	4	6	6	6	8	8	8
Lecturers	15	15	15	15	15	13	13	14
Assistants	1	-	-	-	-	-	-	-
Guest lecturer	-	1	1	1	1	1	1	1

Teachers	13	12	24	19	20	18	19	19
Altogether	33	32	46	41	42	40	41	42

During the reporting period, significant changes were observed in the composition of the teaching staff implementing study courses in the *Medicine* programme.

- The number of elected docents in the academic staff has increased from 4 to 6 starting from study year 2015/2016, from 6 to 8, starting from study year 2018/2019. A lecturer with a doctor's degree in medicine, for example, J. Pupure, is involved in the implementation of the programme. The lecturer has the necessary knowledge and skills in research, which allows students to develop research skills within the study course.
- The number of lecturers in the reporting period has remained unchanged on average for 13 to 15 lecturers. 1 guest lecturer is involved in the implementation of the programme.
- In study year 2013/2014, 1 assistant who completed master's studies and has participated in the implementation of the Medicine study programme in 2014/2015 was elected a lecturer. Stability of the number of elected lecturers forms the core of the programme implementers, which allows to implement the latest solutions in the development of the study programme faster in the long run.
- Compared to 2013/2014 and 2014/2015 the number of invited lecturers has significantly increased from 12 to 24. The percentage of teaching staff involved in the study programme - the academic staff vs the invited lecturers in 2013/2014 and 2014/2015 is as follows - 61% are academic staff and 39% are guest lecturers. Starting from 2016/2017 there is a slight tendency to decrease the percentage of the number of academic staff involved in the implementation of study courses compared to the number of invited lecturers, where on average 53% are academic staff and 47% are invited lecturers.
- In the implementation of study courses, such as “Surgery I, II”, “Toxicology”, “Internal Medicine I, II”, “Obstetrics and Gynecology”, it is important to attract specialists who work in the relevant field and are able to develop the necessary professional skills.
- Risks that may affect the quality of the study process are the involvement of teachers in such study courses as, for example, “Surgery I, II”, “Obstetrics and Gynecology.” Risks are related, firstly, to the high workload of these specialists in health care institutions, and secondly, uncompetitive remuneration. The College needs to find motivating factors for attracting these faculty to ensure the long-term stability of the program.

In realization of the “Medicine” study programme basic courses 47 CP (70,5 ECTS) or 55% are implemented by the academic staff of the college and 39 CP (58,5 ECTS) or 45% by invited lecturers (excluding free choice study courses, qualification work management) *(table 4.2.)*.

Table 3.11.

Number of teaching staff involved in realization of *Social Care* study programme

Post	2013./2014.	2014./2105.	2015./2016.	2016./2017.	2017./2018.	2018./2019.	2019./2020.	2020./2021.
Associate professor	3	3	4	4	4	6	6	6
Lecturers	13	13	10	12	14	9	9	8
Assistants	-	-	-	-	-	-	-	-
Guest lecturer	-	1	1	1	1	1	1	1
Teachers	14	13	22	22	19	20	23	22

Altogether	30	30	37	39	38	36	39	37

During the reporting period, significant changes were observed in the composition of the teaching staff implementing study courses in the *Medicine* programme in the college branch.

- The number of elected docents in the academic staff has increased from 4 to 6 starting from study year 2018/2019. A lecturer with a doctor's degree in medicine, for example, J. Pupure, is involved in the implementation of the programme. The lecturer has the necessary knowledge and skills in research, which allows students to develop research skills within the study course.
- The number of lecturers in the reporting period has decreased from 13 to 8, two have been elected docents, and courses “General propaedeutics”, “Pediatrics I and II”, “Internal medicine I and II” now involve teachers from the Rēzekne hospital, formerly realized by lecturers from Jūrmala. 1 guest lecturer is involved in the implementation of the programme.
- Compared to 2014/2015 the number of invited lecturers has significantly increased from 14 to 22. The percentage of teaching staff involved in the study programme - the academic staff vs the invited lecturers in 2013/2014 and 2014/2015 is as follows - 53% are academic staff and 47% are guest lecturers. Starting from 2015/2016 there is a slight tendency to decrease the percentage of the number of academic staff involved in the implementation of study courses compared to the number of invited lecturers, where on average 38% are academic staff and 62 % are invited lecturers.
- It is important, that study courses, for example, “Surgery I, II”, “Pediatrics I, II”, “Internal medicine I, II”, “Professional technical skills I, II, III” involve specialists from the Rēzekne hospital in implementation of the programme. Said specialists work in the relevant field and are able to develop the professional skills necessary for students, as well as form the core of the programme implementers, which allows long-term planning and search for the latest solutions in the development of the program.

In realization of the “Medicine” study programme basic courses 36 CP (54 ECTS) or 42% are implemented by the academic staff of the college and 50 CP (75 ECTS) or 58% by invited lecturers (excluding free choice study courses, qualification work management).

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 teaching staff involved in implementation of the *Medicine* study programme cooperates with each other to analyze and improve the content, connection and succession of study courses. Cooperation in the study process takes place in lecturing, practice management, development and management of students' qualification papers.

In cooperation with specialists in the field, guest lectures are organized for students to take an in-depth look at some of the topics acquired in the study courses. At the end of the study year, a meeting is organized for the head of the study programme, lecturers, practice supervisors, where improvement and updating of the content of the study courses is discussed to prevent duplication of the study courses. Thus, improving the quality of the study program, both in development and implementation stages.

In general, evaluation of cooperation of the teaching staff of the *Medicine* study programme corresponds to the strategic goals of the *Healthcare* direction. The ratio of the number of students and lecturers in the study programme at the time of submitting the report is reflected in table 3.12.

Table 3.12.

Ratio of the number of students and lecturers in the *Medicine* study programmeand *Medicine* study programme in the branch office

	Number of students Academic year 2020/2021	Number of lecturers Academic year 2020/2021	Ratio of numbers
Medicine	104	42	2,5
Medicine – branch office	118	37	3,2

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	ANNEX_21_Sample_Of_The_Diploma_To_Be_Issued_In_The_Study_Program_Medicine.pdf	21_P_Studiju_Programmas_Ārstniecība_Izsniedzamā_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	ANNEX_22_Statistics_On_Students_In_The_Reporting_Period_In_The_Study_Programm_Medicine.pdf	22_P_Statistika_Par_Studējošajiem_Studiju_Programmā_Ārstniecība.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_23_Compliance_Of_The_Study_Program_Medicine_With_The_State_Education_Standard.pdf	23_P_Studiju_Programmas_Ārstniecība_Atbilstība_Valsts_Izglītības_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)	ANNEX_24_Compliance_Of_Professional_Qualification_Attained_In_Medicine_Study_Programme_With_Professional_Standard.pdf	24_P_Studiju_Programmas_Ārstniecība_Kvalifikācijas_Atbilstība_Profesijas_Standartam.pdf
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)	Compliance_Medicine_Study_Programme_With_Industry-specific_Regulations.pdf	Studiju_Programmas_Ārstniecība_Atbilstība_Nozares_Specifiskajam_Normatīvajam_Regulējumam.pdf
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	ANNEX_25_Mapping_Of_Study_Courses_For_Achieving_The_Study_Results_Of_The_Study_Program_medicine.pdf	25_P_Studiju_Programmas_Ārstniecība_Studiju_Kursu_Kartējums.pdf
The curriculum of the study programme (for each type and form of the implementation of the study programme)	ANNEX_26_Study_Plan_Of_Study_Program_Medicine.pdf	26_P_Studiju_Programmas_Ārstniecība_Studiju_Plāns.pdf
Descriptions of the study courses/ modules	ANNEX_27_Descriptions_Of_Study_Courses_In_Study_Program_Medicine.pdf	27_P_Studiju_Programmas_Ārstniecība_Studiju_Kursu_Apraksti.pdf
Description of the organisation of the internship of the students (if applicable)	ANNEX_28_Study_Programs_Medicine_Student_Practice_Organizations_Description.pdf	28_P_Studiju_Programmas_Ārstniecība_Studējošo_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)		

Medical massage (41722)

Study field	*Health Care*
ProcedureStudyProgram.Name	*Medical massage*
Education classification code	*41722*
Type of the study programme	*First level professional higher education study programme*
Name of the study programme director	*Inguta*
Surname of the study programme director	*Grinberga*
E-mail of the study programme director	*Inguta.Grinberga@lupsk.edu.lv*
Title of the study programme director	*Mg.paed.*
Phone of the study programme director	*+371 28652453*
Goal of the study programme	*To prepare qualified masseurs with first level professional higher education, ensuring the acquisition of theoretical knowledge and professional skills of the field for independent, competitive and responsible operation of a medical practitioner in accordance with the requirements of the labor market.*
Tasks of the study programme	*1. To ensure the acquisition of the first level professional higher education program in accordance with the "Regulations on the State Standard of the First Level Professional Higher Education" specified by the Cabinet of Ministers and to obtain the fourth level professional qualification of a masseur;* *2. To ensure the compliance of theoretical and practical knowledge, professional skills and abilities with the competencies of a masseur, with the professional standards and the requirements of the labor market;* *3. To acquire professional knowledge about different types of massages, ensuring the preservation and improvement of the quality of life of patients related to their health condition;* *4. To develop students' understanding of the basic principles of research, professional ethics and basic social skills in communication in independent and team work;* *5. To know the regulatory enactments and documents regulating the professional activities of masseurs, ensuring the protection of patients' data and the principles of information confidentiality;* *6. To motivate students for further education and professional development.*

Results of the study programme	*Knowledge* *1. Knows and understands the anatomical-physiological and functional features of patients of different age groups, focused on the etiology of diseases, clinic, principles of therapy, care and rehabilitation, linking with research in their field;* *2. Understands the assessment of the patient's health condition, applicable massage methodology, types of special massage, occupational safety and infection control issues;* *3. Understands the applicability of medical devices, therapeutic substances and physical therapy methods used in massage;* *4. Knows the legal aspects of the professional activity of a masseur, observes the principles of personal data protection and information confidentiality;* *Skills* *5. Plans and organizes its activities within the limits of his/her professional competence on the basis of regulations and documents, observing the principles of personal data protection and information confidentiality;* *6. Evaluates the assessment of the patient's health condition and performs a massage, applying the medical devices and therapeutic substances necessary for the work;* *7. Evaluates and performs massage according to the peculiarities of children's development and various groups of patients, such as pregnant women, athletes, etc., evaluate and document the results of massage;* *8. Provides emergency medical assistance;* *9. Analyzes and performs research activities in the fields related to the field, freely reads special literature in a foreign language, applies modern information technologies;* *Competences* *10. Evaluates the patient's health condition and prepares the patient for massage, evaluating the massage indications and contraindications for each patient individually, documenting it;* *11. Analyzes and performs different types of massage for the patient according to his / her state of health, evaluates the results of the massage, documenting them;* *12. Assesses and acts appropriately in life-threatening situations, provide emergency medical assistance;* *13. Evaluates and makes decisions related to commercial activities, choosing the optimal variant of commercial activities, uses and observes the requirements of regulatory enactments regulating commercial activities and labor legal relations;* *14. Evaluates and performs educational work in order to promote the patient's active and conscious participation in the recovery process;* *15. Evaluates and takes responsibility for the results of his / her professional activities and observes the requirements of regulatory enactments in the field of medical treatment, observing the principles of personal data protection and information confidentiality, is able to work in a team;* *16. Analyzes and conducts research activities in their field using modern information technologies.*
Final examination upon the completion of the study programme	*Qualification paper and an integrated examination*

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)	*General or vocational secondary education*
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	*-*
Qualification to be obtained (in english)	*Masseur*

Places of implementation

Place name	City	Address
P.Stradins Medical College of the University of Latvia	JŪRMALA	VIDUS PROSPEKTS 38, JŪRMALA, LV-2010
Rēzekne branch of P.Stradins Medical College of the University of Latvia	RĒZEKNE	N. RANCĀNA IELA 23A, RĒZEKNE, LV-4601

Part time studies - 2 years, 5 months - latvian

Study type and form	*Part time studies*
Duration in full years	*2*
Duration in month	*5*
Language	*latvian*
Amount (CP)	*80*
Admission requirements (in English)	*General or vocational secondary education*
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	*-*
Qualification to be obtained (in english)	*Masseur*

Places of implementation

Place name	City	Address
P.Stradins Medical College of the University of Latvia	JŪRMALA	VIDUS PROSPEKTS 38, JŪRMALA, LV-2010
Rēzekne branch of P.Stradins Medical College of the University of Latvia	RĒZEKNE	N. RANCĀNA IELA 23A, RĒZEKNE, LV-4601

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.

No adjustments were made for the purpose of the study program “Medical Massage”.

The tasks of the study program “Medical massage” have been supplemented since the previous accreditation on the basis of professional standards and regulatory enactments and legislative requirements related to compliance in the labor market in the provision of services, for example, to know the regulatory enactments and documents protection and confidentiality of information

In cooperation with employers, professional associations and guided by the professional standard, the achievements of the “Medical Massage” study programme specify and define the competencies of the profession.

During the reporting period, the full-time study program “Medical massage” has been implemented for 2 years (4 semesters). Part-time study program 2 years and 5 months (5 semesters) in the reporting period have not been realized.

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 first level professional higher education Medical massage study programme *(*Jurmala and Rezekne branch) has been established in accordance with the Law on Higher Education Institutions, Cabinet of Ministers Regulation No. 141 of March 20, 2001, Regulations on the State First Level Professional Higher Education Standard, the Classification of Professions of the Republic of Latvia and LU PSK internal regulatory enactments.

The aim of the Medical Massage study programme is to prepare highly qualified masseurs, whose knowledge and skills are provided by a responsible and independent specialist in the field of health care. Students of the study programme are provided with theoretical knowledge and professional skills in accordance with current trends in the professional work of a masseur and the ability to engage in health care. The tasks of the study programme are aimed at achieving the goals and ensuring the study results. The expected results of the study program are formulated on the basis of the knowledge, skills and competencies defined in the Latvian qualification framework in accordance with the 4th qualification level and the requirements included in the professional

standard.

According to the Education Classification Code of the Republic of Latvia, the Masseur code is 41722, where the first two digits correspond to the second qualification level - the first level professional higher education, to be implemented after obtaining general or vocational secondary education. Duration of full-time studies is two years. The other three digits of the code identify the corresponding education thematic group (health and social welfare), the education thematic area (health care) and the curriculum group (medical services).

Upon graduation of the study programme, the student obtains a diploma of first level professional higher education and the qualification of Masseur. The awarded qualification envisages the acquisition of the necessary knowledge, skills and competencies provided by the evaluated study programme. For example, the professional standard mentions several tasks -
evaluating the patient's state of health to choose and perform appropriate types and techniques of medical massage; taking care of patients after massage; promoting improvement of health status of patients / clients, as well as the quality of life and well-being related to health, etc., the necessary knowledge and skills are included in the content of the study programme and correspond to the title of the Medical Massage study programme.

Duration of the study programme, 2 years, is closely related to the skills, professional knowledge and competencies specified in the professional standard. The specified duration of studies allows to achieve the set goal of the study programme and acquires the necessary skills for performing professional activities.
In part-time study programme it would be possible to acquire the required professional knowledge, skills and competencies within 2.5 years.

Admission requirements (Jurmala and Rezekne branch) are set out in the LU PSK Admission Regulations and are based on the requirements of regulatory enactments. An applicant who has successful assessments in a document certifying secondary education, which confirms knowledge of the state language and a foreign language (e.g. successfully passing centralized examinations) is able to study in the first level higher professional education programme. Applicantspreparation at the previous level of education, motivation to obtain professional education and organization of the study process are able to ensure the achievement of study results.

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

The profession of masseur is becoming more and more popular, as massage is needed not only for the elderly, but also for young, active people who spend long hours at work, as well as young people. Today, many people have a high static load on a daily basis - they have to sit or stand for a long time. It causes muscle tension, hence pain, posture problems, functional problems, a professionally trained masseur can deal with these problems. Massage not only provides physical well-being, but also improves psycho-emotional state.

Analyzing statistical data on students in the Medical Massage study programme in the period from the 2014/2015 academic year, when the study programme was opened, to 2020/2021. It can be concluded that initially there was small interest in the study programme, but starting 2015/2016, there was gradual increase in the number of students during the study year, which could be related to the professional assessment of the field and the recognition of the profession in society, as well

as at the demand of highly qualified specialists in the Latvian labor market.

Qualified masseurs can work in medical institutions, health care centers, rehabilitation centers, private practices, as well as create their own.

The new specialists are well prepared for the requirements of the labor market. In no reporting period have the employers given negative assessments.

The “Medical Massage” study programme prepares highly qualified masseurs who are able to provide quality medical services based on knowledge of human body composition and physiology norms and pathology, assessing the patient's health condition, choose and perform appropriate therapeutic massage types and techniques, perform patient care after massage, to promote the improvement of the health status of patients / clients, as well as the quality of life and well-being related to health, etc.

During the reporting period (from 2013 to 2020), after studying at the college, 88% of young masseurs work in their field (medical institutions, health care centers, rehabilitation centers, private practices).

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.

Analyzing statistical data on students in the Medical Massage study programme in the period from the 2014/2015 academic year, when the study program was opened, to 2020/2021. for the study year (Table 3.1), it can be concluded that initially there is a small interest of students in the study program, but starting from 2015/2016. There is a gradual increase in the number of students during the study year, which could be related to the professional assessment of the field and the recognition of the profession in society, as well as at the demand of highly qualified specialists in the Latvian labor market. The number of matriculated students with previously acquired medical education who join studies at later stages has also increased.

Analyzing the data on student drop-out in the reporting period, there is a significant tendency that this decrease occurred in the first year of studies. Most often, in 93% of cases, studies are not continued due to personal reasons, while in 7% of cases dropout is related to non-timely fulfillment of various study requirements, as well as due to financial reasons.

The Medical Massage study programme is implemented in the official language and by attracting students' private funding *(see annex 38).*

Part-time 2 years and 5 months (7 semesters) in the reporting period has not been realized.

Table 3.1.

Statistical data on students of the *Medical massage* study programme of the college

	Number of students in the programme	Number of students matriculated of the programme	Number of graduates of the programme	Number of dropouts of the programme	
				Year 1	Year 2
2013/2014	-	-	-	-	-

2014/2015	19	30	-	-	-
2015/2016	51	31	21	-	-
2016/2017	87	54	43	4	-
2017/2018	108	66	43	20	1
2018/2019	86	48	42	11	-
2019/2020	80	48	29	11	5
2020/2021	87	87	-	20	-

Analyzing statistical data in the branch in the period from study year 2018/2019, when realization of the programme was begun in the branch office, until study year 2020/2021 *(table 3.2.)*, it can be concluded that the number of students in dynamics has the tendency to increase. A particularly significant increase is observed in this academic year - the total number of students has increased by 50%, which is justified by the students' interest in joining studies in later stages, as well as by the opportunity to study closer to home. The growing number of matriculated students can be justified by the demand for highly qualified specialists in the labor market of Latgale region.

Analyzing the data on student drop-out in the reporting period, there is no big tendency to decrease the number of students, this small decrease occurred in the first year of studies. Most often, in 91% of cases, studies are not continued due to personal reasons, while in 9% of cases, dropout is related to non-timely fulfilment of various study requirements, as well as due to financial reasons. The implementation of Medicine study programme in the branch takes place in the state language, attracting private financing.

Table 3.2.

Statistical data on students of the *Medical massage* study programme of the college branch

	Number of students in the programme	**Number of students matriculated of the programme**	**Number of graduates of the programme**	**Number of dropouts of the programme**	
				Year 1	Year 2
2013/2014	-	-	-	-	-
2014/2015	-	-	-	-	-
2015/2016	-	-	-	-	-
2016/2017	-	-	-	-	-
2017/2018	-	-	-	-	-
2018/2019	12	12	12	3	-
2019/2020	25	15	25	-	1
2020/2021	54	27	14	8	-

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.

First level professional higher education *Medical massage* study programme was established in accordance with the *Law on Higher Education Institutions*, and Cabinet of Ministers' regulations #141 of March 20, 2001 on the *State First Level Professional Higher Education Standard, Professional Standard*, as well as internal regulatory enactments of LU PSK. The *Medical massage* study programme is implemented at the Department of Medicine of LU PSK, attracting lecturers from the Department of Medical Technologies and professionals from the labor market. During the study year 2018/2019, implementation of the programme was also begun in the Rezekne branch of the college.

According to the license, the study programme can be implemented in full-time or part-time studies, and its volume with previously acquired at least secondary (general or secondary professional) education is 80 credit points, which are acquired in full-time studies during 2 years (4 semesters) and part-time studies - within 2.5 years (5 semesters) (Table 3.3). Students with previously acquired medical education are integrated into the study programme on the basis of the internal normative regulation developed by the LU PSK.

The content of the study courses is designed, taking into account the interaction of the results to be achieved in different courses, which ensures the successive acquisition of knowledge. The study programme includes optional study courses, which allow students to gain additional knowledge and skills that complement the speciality.

Table 3.3.

Structure of the *Medical Massage* study programme

Number	Study courses	Type of study courses	Study programme **80 CP** (120 ECTS)
1.	General education study courses with the included 6 CP (9 ECTS) module for development of business professional competencies	A	**20 CP** (30 ECTS)
2.	Branch specific study courses		**36 CP** (54 ECTS)
2.1.	Compulsory study courses	A	*21 CP*
2.2.	Compulsory choice courses – vocational courses	B	*13 CP*
2.3	Free choice	C	*2 CP*
4.	Practice	A	**16 CP** (24 ECTS)
5.	Qualification work	A	**8 CP** (12 ECTS)

Study courses are reviewed every year, taking into account the results of student surveys, labour market trends and requirements in the field of education.

Based on Article 23 of the Civil Protection and Disaster Management Law of the Republic of Latvia, the educational institution ensures teaching of a compulsory civil protection course to students in higher education. The minimum requirements regarding the content of the compulsory civil protection course are determined by the Cabinet of Ministers, therefore the study program Civil Defense - 1 CP (1.5 ECTS) is included in the study programme.

Information included in study courses is interrelated with the goals and tasks of the study courses, which are subordinated to the goal of the study programme and the result to be achieved - knowledge, skills and competences.

Descriptions of study courses are developed by the lecturer. Teaching staff cooperates in development of study results, content, description of independent work and evaluation of results to promote achievement of results of the study programme. When preparing the description of the study course and formulating the results to be achieved, the lecturer focuses both on achieving the goal of the course and on ensuring results of the programme.

Director of the study programme checks, whether results of study courses to be achieved comply with study results of the study programme by performing mapping (annex 41), which reflects interrelation of the goals.

The study course is updated regularly, in accordance with the LU PSK *Study Course Description Development Procedure*. Teaching staff involved in realization of the study programme evaluates not only the content of the study courses, but also the content of independent work and evaluation methods, in order to prepare highly qualified, responsible and independent masseurs in accordance with new tendencies of the field, science and labor market requirements. Also, a large proportion of the teaching staff are medical practitioners are certified who are practitioners in the medical and professional fields. The lecturers of the study program and the leaders of practical classes have established cooperation with Latvian and European professional specialists, as a result of which the experience of the academic staff is improved, which promotes an improvement of the study programme. To ensure unity of theory and practice, majority of lecturers are social work specialists, as well as several practicing specialists in the field.

In order to deepen students' knowledge in cases of neurological diseases starting from 2019/2020. study year, the study course “Internal Medicine and Neurology” was separated to create a study course “Neurology” in the amount of 1 CP. The study courses of the branch were supplemented with the study course “Reflexotherapy”. Acquiring the competencies of the study program requires in-depth knowledge of anatomy, as a result of which the study course “Topographic Anatomy” was created.

Compliance with the requirements of science is ensured by the participation of the teaching staff of the study program in scientific conferences and preparation of reports on research activities. With development of a qualification paper, students get involved in scientific research processes.

In cooperation with the Latvian Association of Masseurs and the Latvian Association of Physical Medicine and analyzing topicality of the labor market, it can be concluded that nowadays there is a demand for specialists who, in addition to specialized knowledge, are also proficient in other important areas related to the profession, such as record keeping and labor protection, business, financial accounting and pedagogy. Collaborating and surveying employers are required skills such as the ability to analyze, think critically and debate. Theoretical knowledge study courses included in the study programme - practice in clinical environment and the development of a qualification paper are aimed at developing of these skills.

During studies, students acquire the necessary knowledge and skills in accordance with requirements defined in professional standard. This is also confirmed by students' questionnaire and positive evaluations submitted by the employers, as well as evaluation of graduates and their employment in the profession.

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 courses foreseen in the Medical Massage (In Jurmala and Rezekne branch) study program are implemented in accordance with the descriptions of the study courses, in which the course evaluation system is determined in accordance with Cabinet of Ministers Regulation No. 141 of March 20, 2001 *On the basic principles and procedures for the evaluation of higher education*, as well as the procedure for the examination of the study courses of the LU PSK and the Regulations of the State Final Examination of the University of Latvia. When starting to work with students, the lecturers acquaint the students with the requirements of the study course and with the knowledge skills assessment system.

In order to achieve the goals of study courses, the study process (In Jurmala and Rezekne branch) is organized in auditoriums, practical training rooms, laboratories, computer rooms and institutions, in accordance with the study programme. The choice of study form is determined by the aim and content of the study course. Implementation of the study programme is realised using various methods that allow to ensure the achievement of study results and promote the organization of a student-centered study process.

- Lectures - are used for teaching both general education and branch study courses, as well as professional specialization study courses. Within this, students are presented with theoretical questions, illustrated with practical examples.
- Seminars are a supplement to theoretical and practical knowledge of current issues. Seminars use in-depth discussion of issues from the study literature in a group of students - 10 - 15 students. Seminar classes, for example, are used for the acquisition of foreign languages, integration of theoretical knowledge of anatomy and physiology in practical

situational tasks, as well as acquisition of business competencies.

- Group work is one of the forms of skills acquisition, which not only strengthens the material acquired in lectures and seminars, but also develops students' communication and work organization skills. Group work is intended, for example, for study courses, basics of project development and management, basics of pedagogy, general psychology and
- Practical classes ensure the acquisition of skills and abilities specified in the study courses. To ensure the quality of the acquisition of professional study courses, the groups of practical classes consist of 5 - 8 students, and the duration of practical classes from 3 - 6 academic hours. In practical classes, students strengthen their skills and abilities in classical massage, children's massage, massage in cases of various pathologies, etc. using the medical devices and therapeutic substances necessary for the work. For the organization of practical classes in the pre-clinic offices and practical classrooms of the Jūrmala and Rēzekne branches of the college, there are simulation devices, mulages and equipment in accordance with the requirements of the industry and the latest medical trends.
- The study program defines independent work in the amount of 25% of the study course. Independent work is worked individually or in groups, it promotes students' ability to independently perform certain tasks. Depending on the specifics, in several study courses the tasks of independent work are developed, for example, in classical massage a report on possible contraindications in cases of various pathologies.

In the study process, guest lectures are also provided, attracting highly qualified local and foreign specialists. At the beginning of the semester, the lecturers of the program confirm the times of weekly consultations for the successful course of the study process.

Assessment is the basis for study content, forms, organizational planning, compilation, analysis processes to ensure the professional development of young professionals. Assessment gives students the opportunity to show the extent to which they have achieved the expected results by receiving feedback on the learning process.

Lecturer of each course has developed an assessment methodology, but the assessment system is discussed in the Medicine Study Programme Council and, as a result, additions are made if necessary. The assessment methodology indicates what percentage of the total assessment each assessment criterion makes up and introduces it to the students at the beginning of the study course. Analyzing the requirements for obtaining credit points included in the course descriptions, it must be concluded that on average 50% of the assessment consists of the final examination of study courses.

The procedure for taking and accepting examinations in the 1st level professional higher study programme, the rights and obligations of students and lecturers when taking and accepting examinations, as well as the types and forms of examinations are determined by the examination procedure of P.Stradiņš Medical College study courses. The form of the examination is determined in the study program.

The examinations are divided into regular examinations, final examinations of the study course, and state final examinations. For successful acquisition of the study programme, students must attend all study courses and successfully pass intermediate examinations, tests, exams and receive a positive evaluation in accordance with the regulations of the LU PSK. If the student is dissatisfied with an assessment, according to the LU PSK study course examination procedure, the student has a right to challenge the lecturer's assessment within one week after announcing the examination results by submitting an appeal to the department, which is considered by the study program council, and receive an answer within 7 days.

Analyzing the requirements for obtaining credit points included in the course descriptions, it must

be concluded that:

- on average 50% of the assessment consists of the final examination of a study course (test or exam),
- on average 20% of the assessment is the assessment of independent work,
- on average 30% of the assessment consists of theoretical course examinations and / or assessment of practical work.

Regular examinations are examinations organized during the acquisition of the study course, which are organized and managed by the lecturer of the study course. The types of regular examinations are - tests, analysis of problem situations, reports in seminars, practical works, reports and other forms that promote qualitative acquisition of the study subject.
The types of final examinations of study courses are an examination or test, which is specified in the study program. The type of examination may be oral, written or a practical test.

At the end of the study process, a qualification examination must be taken, the components of which are the presentation of the qualification paper and the integrated theoretical exam, which is assessed on a 10-point scale. The organization and content of state final examinations are regulated by the Regulations P. Stradiņš Medical College of the University of Latvia on state final examinations. The presentation of the qualification paper is regulated by the procedure for the development and defense of the qualification papers P. Stradiņš Medical College of the University of Latvia. The integrated theoretical exam includes a presentation of a theoretical question and an analysis of the practical situation. The student answers three theoretical questions by lot and performs one demonstration of a practical task. The total amount of theoretical questions is 50. The assessment of the integrated theoretical exam consists of 40% of the theoretical question and 60% of the practical task demonstration assessment.
The evaluation system is analyzed and improved regularly.

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 practice is organized in accordance with the state standard of first level professional higher education. The internship is regulated by the internship regulations of P. Stradiņš Medical College of the University of Latvia and the tripartite internship agreement between the college, the student and the internship place.

Internships in professional study programmes are a mandatory component. Students' practice is developed as an integral part of professional education, which allows to deepen professional knowledge, develop skills, ability to work in a team, communicativeness, ability to make decisions in different situations, to develop critical thinking. The total volume of practice is 16 CP (24 ECTS) *(table 3.4.).*

Table 3.4.

Depiction of the total volume of practice

No	Title of the practice part	CP/ ECTS	Time of implementation	
			Full-time studies 2 years	**Part-time studies 2,5 years**
1.	**Classical massage**	**4 CP** 6 ECTS	1st study year (2nd semester)	1st study year (2nd semester)
2.	**Qualification practice**	**12 CP** 18 ECTS	2nd study year (4th semester)	3rd study year (5th semester)

The overall goal of the study practice is to prepare students for the profession of a masseur, who assesses the patient's health condition, evaluates the massages assigned to the patient, chooses the most appropriate type of massage and performs medical massage, thus promoting improvement and restoration of patient health, functional condition, quality of life. Course of practice: in medical institutions, health care centres, rehabilitation centres, private practice under the guidance of a certified masseur. A programme has been developed for the internship, which the student and the head of the internship place get acquainted with. The student is free to choose an internship place, or the program administration provides support in finding one for students in both Jurmala and Rezekne branches.

Classical massage practice aims to improve and strengthen the acquired theoretical knowledge about classical massage, its mechanisms of action, indications, contraindications and to develop skills of basic and auxiliary techniques. The aim of qualification practice is to improve and strengthen the acquired theoretical knowledge by developing the student's professional skills, to prepare students for independent, responsible professional activity.

The evaluation of practice is performed in accordance with the internship program. After the end of a practice, the student submits a practice report and a confirmation of the internship place to the head of the college internship within a certain period of time. Assessments of qualification practice are carried out in a 10-point system, which consist of an assessment of the practice diary and a description of the practice place, which is performed according to the criteria of a certain form. The internship is evaluated according to the criteria by the direct practice supervisor - the responsible person under whose leadership the student performs the practice tasks. The connection of the students' practice tasks with the study results to be achieved in the study program is visible in table 3.5

In order to achieve the tasks set within the internship in Jūrmala and Rēzekne branch, the head of the study program “Medical Massage” organizes the student's internship from the college and cooperates with the direct internship supervisor from the institution providing the internship and makes sure that the internship tasks are achieved. This collaboration helps to ensure that students achieve the set internship objectives. In turn, the practice manager of the institution is the one under whose leadership the student performs the practice tasks. A program for the internship of a masseur, which includes the organization of the internship by the college and the institution, is attached in Annex 44.

Table 3.5.

Linking tasks of the *Medical massage* study programme practice with the results of the study programme

Results of the study programme	1.	2.	3.	4.	5.	6.	7.
Tasks of study practices	Performs assessment of the patient's health condition and prepares the patient for massage, evaluating the massage indications and contraindications for each patient individually documenting it;	Analyzes and performs different types of massage for the patient according to his / her health condition, evaluate the massage results by documenting them;	Selects and applies medical devices and therapeutic substances suitable for massage;	Evaluates the early and late response of the patient after the massage and evaluates and document the results of the massage;	Evaluates and observes infection control measures, labor protection regulatory enactments;	Evaluates and conducts educational work to promote active and conscious participation of the patient in the recovery process;	Evaluates and takes responsibility for the results of his / her professional activities and observes the requirements of regulatory enactments in the field of medical treatment, observing the principles of personal data protection and information confidentiality, is able to work in a team;
To get acquainted with the place of practice, goals, tasks					+		+
To be able to plan their work, maintain the cleanliness of the work environment,					+		+
To apply communication skills in work with clients and colleagues;						+	+
To strengthen theoretical knowledge and skills in the assessment of the patient’s health condition, evaluating and choosing the appropriate massage procedure.	+		+				
To evaluate and perform the massage procedure according to the patient's state of health.		+	+				
To evaluate and perform patient care after the massage, observing the results of the procedure, document the necessary data.				+		+	
To observe the professional ethics of a masseur, moral and ethical norms, principles of confidentiality.	+						+

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 choose the topic of their qualification paper in accordance with the *Procedure for Development, Submission and Presentation of the Qualification Paper Developed* by the LU PSK. The student has an opportunity to offer a topic of his / her choosing based on his / her knowledge

and professional skills. If necessary, the student can consult with the teaching staff of the programme about topicality of the theme.

The choice of the topic of the qualification papers is determined by:

- revelence in the industry.Academic staff discuss and propose research topics with industry professionals;
- research directions of internal scientific projects;
- College research strategy.

Qualification work must be related to professional qualifications, applied and practically applicable in a professional environment. After choosing the topic of the qualification paper, a supervisor of the qualification paper is appointed.

Each year, students present their research topics at local and international conferences. For example, at the 2018, 9th student conference "Pain" a presentation of the theme *Prevention of tension headaches in young people* was carried out. The qualification paper was evaluated very highly. After the presentation session of the qualification examination, head of the state final examination commission provides his/her assessment of the procedure and topics chosen by the students.

The aim of the Medical Massage study programme is to ensure the provision of high-quality medical services based on knowledge of the norms and pathology of the human body structure and physiology. According to the goal and research strategy, students carry out research - Health aspects in gerontology, research - Classical massage to improve the psycho-emotional state of seniors. Topicality about youth health and habits influencing it, research - Neck massage for young people with headaches. Including the topicality of the direction about the Biopsychosocial model in medicine, the research - The application of massage in the case of psycho-emotional overload. Physiological and psychosocial aging processes are considered in the study - Use of massage in patients after stroke in the treatment of hemiparesis. Multidimensional approach to patient care, analyzed in the study - Observance of the basic principles of ergonomics for the health of office workers. Students often use the assessment of patients after the procedure, thus objectively reflecting the achieved indicators - Assessment of symptoms and functional status before and after the massage course in patients with carpal tunnel syndrome. A summary of qualification work evaluations, see table 3.6.

Table 3.6.

Evaluation of qualification works of the *Medical massage* study programme

Academic year	**Evaluation in points**							**Number of graduates**
	4 almost satisfactory	**5** satisfactory	**6** almost good	**7** good	**8** very good	**9** excellent	**10** with distinction	
2013/14	-	-	-	-	-	-	-	-
2014/15	-	-	-	-	-	-	-	-
2015/16	-	-	3	5	4	5	4	21
2016/17	1	-	3	8	12	14	5	43
2017/18	1	2	2	5	20	12	1	43
2018/19	-	3	3	14	10	8	4	42
2019/20	1	3	-	9	7	6	3	29

Number:	**3**	**8**	**11**	**41**	**53**	**45**	**17**	**178**

The topics of the Medical Massage study programme qualification works fully correspond to the content and requirements of the study programme, as well as the current issues of the modern labor market. From academic year 2015/2016, 178 have graduated from the LU PSK.

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 main source of funding for the *Medical massage* study programme is personal funding. Implementation of study process takes place in the college and its Rēzekne branch.

The study process is implemented in well-equipped college auditoriums, pre-clinic offices (procedure equipment room, emergency medical care room and) and practical classrooms (massage room). The medical massage training room is equipped with a large monitor and a computer with an internet connection for displaying training material and creating well-being during procedures, as well as an additional temperature regime in the room from autumn 2018.

Since the study year 2015/2016 until the study year 2020/2021 practical classrooms are regularly supplemented and renewed with the material and technical provision necessary for the implementation of the study programme. The practical massage room in 2018 was supplemented with 10 multifunctional massage couches Royal / Juventas, 5 patient tables, tonometers and 5 massage dolls, which create wider opportunities for students to develop skills and techniques of various massage methods. 2018/2019. Implementation of the study programme was also started in the branch (winter admission).

In Rēzekne branch, the study process is carried out in well-equipped auditoriums with computer technologies, pre-clinic offices, in order to ensure the course of practical classes in emergency medical care, acquisition of clinical procedures, acquisition of massages.

The branch has equipment provided for the acquisition of practical skills of the study programme, that is, both massage couches and equipment required in accordance with the procedures.

Between 2015 and 2019, pre-clinical and treatment rooms were equipped with 55-inch monitors and computers with Internet access to visualize how to manipulate according to industry standards, thus complementing the learning process with learning conditions for cognitive manipulations.

From the spring of 2020, the facilities provided by the Microsoft Office365 platform have been implemented at the University of Latvia. Academic staff and students have access to an interactive environment, in which it is possible to additionally organize the learning process, also using the interactive Microsoft TEAMS platform.

Every year, the computer equipment and software required for the study process is improved and supplemented, to provide students with an opportunity to acquire information technologies. There

are 18 workplaces for students and 1 workstation for a lecturer equipped with a multimedia projector.

The library provides students with study literature and periodicals in Latvian, English, German and Russian. Periodicals in Latvian, German and Russian are subscribed: "Doctus", "Latvian doctor", "doctor", "Le Nouvelles Estetiques Latvia", "Cosmetics and medicine". Every year the library fund is supplemented with new study materials. Students have access to the EBSCO database, the resources of which can be used both in person and remotely.

In general, the resources and provision of the study programme correspond to the conditions and results of the implementation of the objectives of the study programme. Regular addition of material and technical base ensures achievement of high-quality planned study results.

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).

In the Medical massage study programme, the main source of funding is student self-financing, both in Jūrmala and in the Rēzekne branch in full-time and part-time studies. Self-financing of a study place in the Medical massage study programme per one student is 1200 EUR. The real costs of the study programme per student are shown (table 3.7.). Funding for full-fledged implementation of the study programme is obtained from the college's income and projects financed by European Union organizations and other international organizations. The minimum number of students to ensure the profitability of the study programme is 15.

Table 3.7.

Cost calculation of the Medical massage study programme (In Jūrmala and Rēzekne branch in full-time and part-time studies)

Salary per one study place	Employer's compulsory state social insurance contributions per one study place per year	Cost of business trips and travel per one study place per year	Service costs per study place per year	Costs of materials, energy resources, water and inventory per study place per year	Cost of purchasing books and magazines per student per year	Equipment purchase and modernization costs per study place per year	**Cost per study place**
1034.5	244.08	8.9	56	33.89	7.99	7.61	**1392.97**

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.

Qualification of the teaching staff involved in implementation of the *Medical massage* study programme study courses complies with the requirements of regulatory enactments and the strategic goals set by the college. 32 lecturers are involved in implementation of the study programme, 17 of which are academic staff *elected in LU PSK), 1 guest lecturer and 14 invited lecturers. One lecturer with a doctor's degree in medicine, 1 lecturer with a doctor’s degree in pedagogy, 24 lecturers with master’s degree and 4 lecturers with a bachelor’s degree, as well as 2 lecturer with first level higher education.

Qualification of the teaching staff involved in implementation of the *Medical massage* study programme study courses in Rēzekne branch complies with the requirements of regulatory enactments and the strategic goals set by the college. 30 lecturers are involved in implementation of the study programme, 12 of which are academic staff (elected LU PSK), 1 guest lecturer and 17 invited lecturers. One lecturer with a doctor's degree in medicine, 1 lecturer with a doctor’s degree in pedagogy, 21 lecturers with master’s degree and 6 lecturers with a bachelor’s degree, as well as 2 lecturer with first level higher education.

The qualifications acquired by the teaching staff play a very important role in enabling students to acquire a wide range of knowledge and versatile skills and to develop professional competencies under the guidance of lecturers. The majority of lecturers are professionals who specialize in their respective professional field and have worked for a long time, or work in related professions, thus ensuring the quality of the study results to be achieved. In addition, the teaching staff involved in the implementation of the study program has a higher pedagogical education, a master's or doctoral degree in educational science, allowing to ensure the link between practice and science, and the involvement of students in research.

By improving and enhancing the qualification of the teaching staff, students are provided with current innovations in the field within the study course. For example, the teacher of the study course “Massage in cases of different pathologies”, has participated in international continuing education courses, in which the topicalities of the field related to connective tissue and segment massage have been mastered. Continuing education courses took place in Austria (Osterreich, St. Georgen 66, Schloss-schule) from 13.09.2021. until 17.09.

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.

Table 3.8.

Number of teaching staff involved in realization of the study programme

Post	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021
Associate professor	5	5	5	5	5	5	4
Lecturers	9	9	11	12	12	12	13
Assistants	-	-	-	-	-	-	-
Guest lecturer	1	1	1	1	1	1	1
Teachers	18	18	19	15	18	18	14
Altogether	33	33	36	33	36	36	32

During the reporting period, following changes were observed in the composition of the teaching staff implementing study courses in the *Medical massage* programme *(table 3.8.)*.

- The number of elected docents in the academic staff has decreased from 5 to 4, starting academic year 2019/2020. A lecturer with a doctor's degree in medicine, for example, Kokle – Narbuta, I. Briža. The lecturer has the necessary knowledge and skills in research, which allows students to develop research skills within the study course.
- The number of lecturers in the reporting period has increased from 9 to 13. 1 guest lecturer is involved in the implementation of the programme. The stability of the number of elected lecturers forms the core of the program implementers, which allows to implement the latest solutions in the development of the program faster in the long run.
- During the reporting period, the average number of attracted lecturers remained almost unchanged. Compared to 2014/2015 the number of invited lecturers has significantly decreased from 18 to 14. The percentage of teaching staff involved in the study programme - the academic staff vs the invited lecturers in /2021 is as follows - 53% are academic staff and 47% are guest lecturers.
- 2020/2021 the college has succeeded in attracting a lecturer in the study course “Segmental Massage”, which ensures the long-term stability of the study course implementation.
- Risks that may affect the quality of the study process are the involvement of teachers in such study courses as, for example, “Massage in sports medicine”, “Manual lymphatic drainage”. Risks are related, firstly, to the small number of these specialists in health care institutions, and secondly, uncompetitive remuneration. The College needs to find motivating factors for attracting these faculty to ensure the long-term stability of the program.

In realization of the “Medical massage” study programme basic courses 38 CP (57 ECTS) or 70% are implemented by the academic staff of the college and 16 CP (24 ECTS) or 30% by invited lecturers (excluding free choice study courses, qualification work management).

Table 3.9.

Number of teaching staff involved in realization of the study programme in Rēzekne branch

Post	2018./2019	2019/2020	2020/2021

Associate professor	3	4	4
Lecturers	6	10	8
Assistants	-	-	-
Guest lecturer	1	1	1
Teachers	5	7	17
Altogether	15	22	30

During the reporting period, significant changes were observed in the composition of the teaching staff implementing study courses in the *Medical Massage* programme *(table 3.9.)*. The changes must be seen within the time factor, as the implementation of the program in the branch started in 2018/2019. study year.

- The number of elected docents in the academic staff has increased from 3 to 4, starting academic year 2019/2020. A lecturer with a doctor's degree in medicine, for example, I. Briža. The lecturer has the necessary knowledge and skills in research, which allows students to develop research skills within the study course.
- The number of lecturers in the reporting period has increased from 6 to 8. This might be due to the fact, that currently there are three groups of students involved in the programme. 1 guest lecturer is involved in the implementation of the programme.
- During the reporting period the number of elected docents has increased from 9 to 12. The stability of the number of elected lecturers forms the core of the program implementers, which allows to implement the latest solutions in the development of the program faster in the long run.
- Compared to 2018/2019 the number of invited lecturers has significantly increased from 6 to 18. The percentage of teaching staff involved in the study programme - the academic staff vs the invited lecturers is as follows - 40% are academic staff and 60% are guest lecturers. This can be explained by the increase in the number of student groups in the branch.
- 2020/2021 the college has succeeded in attracting a lecturer in the study course “Segmental Massage”, which ensures the long-term stability of the study course implementation.
- Risks that may affect the quality of the study process are the involvement of teachers in such study courses as, for example, “Massage in sports medicine”, “Manual lymphatic drainage”. Risks are related, firstly, to the small number of these specialists in health care institutions, and secondly, uncompetitive remuneration. The College needs to find motivating factors for attracting these faculty to ensure the long-term stability of the program.

In realization of the “Medical massage” study programme basic courses 30 CP (57 ECTS) or 56% are implemented by the academic staff of the college and 24 CP (24 ECTS) or 44% by invited lecturers (excluding free choice study courses, qualification work management).

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 teaching staff involved in implementation of the *Medical massage* study programme cooperates with each other to analyze and improve the content, connection and succession of study courses. The study programme manager, study course lecturers and practice managers participate in the meetings of the study programme council of the Department of Medicine to discuss the results to be achieved by the study courses and the content of the courses, thus avoiding duplication of information.

According to the certification results, every year the administration of the study programme participates in the discussion of the results, as a result of which changes and additions are made at the level of the study programme study courses. For example, analyzing certain difficulties related to the lack of uniform classical massage guidelines in the country, lecturer Vineta Nehvjadoviča in cooperation with the Latvian Association of Physical Medicine developed the methodological material Classical Massage.

The cooperation of the teaching staff between study programmes of the Department of Medicine takes place in the development of students' qualification papers, management of internships and teaching of study courses.

The teaching staff of the Medical Massage study programme regularly cooperates by organizing and participating in various conferences in Latvia and Europe. Within the framework of the study programme, since 2017 an International Scientific Conference “Health. Wellness. Internship.” has been held, which involves students, industry specialists and associations.

The common goal of the teaching staff of the Medical Massage study programme is high-quality implementation of the study program.

Relationship between the number of students and the teaching staff within the study programme of study year 2020/2021 is depicted in table 3.10.

Table 3.10.

Ratio of the number of students and lecturers in the *Medical massage* study programme

Number of students Academic year 2020/2021	Number of lecturers Academic year 2020/2021	Ratio of numbers
College		
77	32	2,4
Branch office of the college		
61	30	2,0

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	ANNEX_37_Sample_Of_The_Diploma_To_Be_Issued_In_The_Study_Program_Medical_Massage.pdf	37_P_Studiju_Programmas_Arstnieciska_masaza_Izsniedzama_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	ANNEX_38_Statistics_On_Students_In_The_Reporting_Periodi_In_The_Study_Programm_Medical_Massage.pdf	38_P_Statistika_Par_Studējošajiem_Studiju_Programmā_Ārstnieciskā_Masāža.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_39_Compliance_Of_The_Study_Program_Medical_Massage_With_The_State_Education_Standard.pdf	39_P_Studiju_Programmas_Ārstnieciskā_Masāža_Atbilstība_Valsts_Izglītības_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)	ANNEX_40_Compliance_Of_Professional_Qualification_Attained_In_Medical_Massage_Study_Programme_With_Professional_Standard.pdf	40_P_Studiju_Programmas_Ārstnieciskā_Masāža_Kvalifikācijas_Atbilstība_Profesijas_Standartam.pdf
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)	Compliance_Medical_Massage_Study_Programme_With_Industry-specific_Regulations.pdf	Studiju_Programmas_Ārstnieciskā_Masāža_Atbilstība_Nozares_Specifiskajam_Normatīvajam_Regulējumam.pdf
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	ANNEX_41_Mapping_Of_Study_Courses_For_Achieving_The_Study_Results_Of_The_Study_Program_Medical_Massage.pdf	41_P_Studiju_Programmas_Ārstnieciskā_Masāža_Studiju_Kursu_Kartējums.pdf
The curriculum of the study programme (for each type and form of the implementation of the study programme)	ANNEX_42_Study_Plan_Of_Study_Pogram_Medical_Massage.pdf	42_P_Studiju_Programmas_Ārstnieciskā_Masāža_Studiju_Plāns.pdf
Descriptions of the study courses/ modules	ANNEX_43_Descriptions_Of_Study_Courses_In_Study_Program_Medical_Massage_Full-time_Part-time_studies.pdf	43_P_Studiju_Programmas_Ārstnieciskā_Masāža_Studiju_Kursu_Apraksti_Pilna-laika_Nepilna-laika_Studijās.pdf
Description of the organisation of the internship of the students (if applicable)	ANNEX_44_Study_Programs_Medical_Massage_Student_Practice_Organizations_Description.pdf	44_P_Studiju_Programmas_Ārstnieciskā_Masāža_Studējošo_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)		

Podology (41722)

Study field	*Health Care*
ProcedureStudyProgram.Name	*Podology*
Education classification code	*41722*
Type of the study programme	*First level professional higher education study programme*
Name of the study programme director	*Aelita*
Surname of the study programme director	*Koha*
E-mail of the study programme director	*Aelita.Koha@lupsk.edu.lv*
Title of the study programme director	*Mg.sc.educ.,Bc.sc.sal.*
Phone of the study programme director	*+371 29457413*
Goal of the study programme	*The aim of the study programme is to prepare highly qualified, modernly educated, competent and competitive specialists in podiatry.*
Tasks of the study programme	*1. To ensure compliance of students' theoretical knowledge, practical skills and professional attitude with the standard of the podium profession, labor market requirements and international practice;* *2. To ensure the acquisition of students' professional knowledge and skills in podiatry in order to be able to diagnose podological care for patients of all ages, identify high-risk patients, detect late complications of diabetes in time, detect early foot infections and provide qualified podological care;* *3. To provide students with practical training in pre-clinical offices and practice bases;* *4. To promote students' creative, research and social activities by contributing to the development of the industry;* *5. To ensure the ability to carry out professional activities in a multicultural environment and to establish interdisciplinary cooperation in the health care team, observing the principles of confidentiality and personal data protection;* *6. To ensure the acquisition of students' knowledge and skills in educating patients and the public about the preservation of foot health;* *7. To promote the responsibility of the future specialist for the maintenance of his / her professional qualification by constantly improving knowledge and skills, promoting professional development.*

Results of the study programme	*Knowledge:* *1. Understands the relationship of diseases of organ systems with foot diseases, subjective, objective and instrumental examination methods in assessing the patient's health condition;* *2. Understands the care of medical feet, the assessment of the condition and constitutional peculiarities of the patient's toenails, skin and musculoskeletal system, the application of the type of foot care appropriate for the diagnosis of podological care;* *3. Knows hygiene and epidemiological measures in provision, foot care technologies and examination methods, care planning and implementation of procedures.* *Skills:* *4. Is able to link the philosophy of patient care with all stages of patient care, observing the principles of ethics, the principles of personal data protection and the basic rules of successful communication;* *5. Is able to apply information technologies for information acquisition, processing and analysis;* *6. Is able to apply foot care technologies and various foot examination methods, performs foot care in accordance with the diagnosis of podological care;* *7. Is able to choose foot care methods according to the diagnosis of podological care and evaluates the results of patients' foot and foot care.* *Kompetence:* *8. Is able to evaluate the condition of the feet of patients of all age groups and determine the diagnosis of podological care, document the stages of the podological care plan.* *9. Is able to perform podological care, including diabetic foot care, choosing the type of foot care appropriate for the diagnosis of podological care, plans and implements educational activities on the need to maintain the health of foot skin and toenails, applying self-care measures;* *10. Is able to work independently, takes initiative and responsibility for the results of his / her professional activity, improves professional knowledge and skills in the process of further education and maintains his / her professional competence;* *11. Is able to work in a multidisciplinary team, cooperates with other health and social care professionals and institutions, educates health care specialists, medical support persons and members of the public on the prevention of foot injuries.*
Final examination upon the completion of the study programme	*Qualification paper and an integrated examination.*

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)	*General or vocational secondary education*
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	*-*
Qualification to be obtained (in english)	*Podologist*

Places of implementation

Place name	City	Address
P.Stradins Medical College of the University of Latvia	JŪRMALA	VIDUS PROSPEKTS 38, JŪRMALA, LV-2010

Part time studies - 2 years, 5 months - latvian

Study type and form	*Part time studies*
Duration in full years	*2*
Duration in month	*5*
Language	*latvian*
Amount (CP)	*80*
Admission requirements (in English)	*General or vocational secondary education*
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	*-*
Qualification to be obtained (in english)	*Podologist*

Places of implementation

Place name	City	Address
P.Stradins Medical College of the University of Latvia	JŪRMALA	VIDUS PROSPEKTS 38, JŪRMALA, LV-2010

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.

Since the previous accreditation of the study field, the study results to be achieved by the study programme have been improved, precisely defining the acquired knowledge, skills and competencies in accordance with the updated professional standard, which enables graduates to carry out professional activities at a qualified and high level, such as knowledge of the provision of hygiene and epidemiological measures in foot care technologies and examination methods, care planning and procedures; the ability to perform podological care, including the care of the diabetic foot, choosing the type of foot care appropriate for the diagnosis of podological care, plans and implements educational activities on the need to maintain the health of the skin of the feet and toenails, applying self-care measures.

At the end of the study programme, the part of the final examination has been changed, replacing the test with an integrated examination in accordance with the new competences approach.

Taking into account labor market trends and the growing interest in studies that can be combined with work, since the previous accreditation of the field of study, the opportunity to study part-time for 2.5 years is offered, maintaining the study program goal, tasks and study program volume (CP; ECTS).

No new changes in the study program parameters are planned within the study field evaluation procedure.

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 first level professional higher education Podology study programme has been established in accordance with the Law on Higher Education Institutions, Cabinet of Ministers Regulation No. 141 of March 20, 2001, Regulations on the State First Level Professional Higher Education Standard, the Classification of Professions of the Republic of Latvia and LU PSK internal regulatory enactments.
Admission rules, goals and planned results of the Podology study programme have been developed and defined in compliance with the principles of the Latvian Qualifications Framework (LQF) and the European Qualifications Framework (EQF). As a result, providing a set of knowledge, skills and attitudes that allow to perform a qualified podological care process in accordance with the

professional standard, and provide an opportunity for further studies in bachelor's and second-level professional higher education study programs, in accordance with the Bologna Declaration, in Latvia and other European countries.

Due to increase in the number of applicants, and in order to ensure the interests of employers, additional admission criteria for the admission of specialists working in related fields were developed during the reporting period. Applicants who can present and submit any of the following documents to the selection board will be given priority in the competition:

- work experience in diabetic foot care offices (certificate from the employer),
- Member of the Latvian Podiatric Association with professional experience of no less than 5 years in a similarly related field (has acquired professional development courses in medical foot care and device pedicure technologies in the amount of no less than 350 hours),
- with the employer's recommendations from the regions of Latvia.

The parameters of the study program are interrelated and correspond to the acquired professional qualification. Graduates of the study program Podology obtain a professional qualification - podologist and medical practitioner status.

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

As a result of technological possibilities and innovations, the structure of a podiatrist's work is changing, in parallel with provisions set by the *International Working Group on the Diabetic Foot* guidelines for the care of diabetic foot, and *Practical Guidelines on the Management and Prevention of the Diabetic Foot (IWGGDF, 2011),* that each country should have programs for foot care specialists to minimize the development of severe foot damage in diabetic patients, the medical indications for foot care have now expanded to include patients with dermatological, orthopedic, peripheral blood circulation, and other pathologies. On the other hand, the society is currently paying more and more attention to the quality of health care services, infection control and patient safety, therefore podologists are expected to have a wide range of job opportunities when working with patients of all ages.

The Podology study programme is the only one of its kind in Latvia.

The average indicators of the analysis results of the reporting period (2017-2020) show that, 75% of graduates work in the acquired specialty, 15% continue their studies in related fields, such as physiotherapist, technical orthopaedist, etc. The remaining 10% of graduates do not work in the profession for various reasons, such as family circumstances, change of residence, etc. 30% of 75% of employees start professional activities in medical institutions in state-funded foot care offices. Others develop their own private practices or join the field of beauty and wellness services by providing the services of a qualified podiatrist in institutions registered with the Health Inspectorate.

The offered opportunity to combine studies with work by studying part-time (2.5 years) was not realized in this reporting period.

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.

Analyzing statistical data on students in the Podology study programme in the period from the academic year 2013/2014 to academic year 2020/2021 it can be concluded that the number of students ir stable, which indicates topicality of the programme and the demand for it amongst applicants.

Table 3.1.

Number of students of the Podology study programme in the reporting period

	Number of students in the budget financing study programme	Number of graduates in the budget financing study programme	Student dropout from the budget funding programme	Number of students of the self-financed study programme	Number of graduates of the self-financed study programme	Student dropout from the self-financed study programme
2013/2014	59	30	5	-	-	-
2014/2015	59	20	11	-	-	-
2015/2016	62	24	9	11	-	-
2016/2017	63	24	6	28	-	-
2017/2018	64	21	10	33	11	4
2018/2019	58	26	5	29	16	2
2019/2020	55	24	9	14	13	3
2020/2021	57	-	4	12	10	-

Starting academic year 2015/2016, taking into account the high demand of applicants to study, students in the Podology programme are admitted to self-financed full-time studies. Dynamics of the number of students is seen in appendix 45.

Analyzing the data on student drop-out in the reporting period, it can be seen that on average drop-out number of students is relatively small, fluctuating in the range of 6-8%. The most common reasons for dropping out of studies are: family circumstances, personal reasons, difficulties in combining studies with work. In order to reduce student drop-out and promote students' motivation to continue their studies, all students are provided with face-to-face and e-learning consultations, as well as the opportunity to ask questions and receive answers outside of classes and consultation hours. Group curators inform students about current events in the study process, provide individual support to those students who have difficulty integrating into the study environment, help solve problems that students face on a daily basis, as well as organize group adaptation and cohesion events.

During the reporting period, part-time full-time studies (2.5 years) were 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.

First level professional higher education *Podology* study programme was established in accordance with the *Law on Higher Education Institutions*, and Cabinet of Ministers' regulations #141 of March 20, 2001 on the *State First Level Professional Higher Education Standard, Professional Standard*, as well as internal regulatory enactments of LU PSK. The *Podology* study programme is implemented at the Department of Medical Technologies of LU PSK.

The form of studies is full-time studies, the duration of studies is 2 years and part-time studies - 2.5 years. The volume of the programme is 80 CP or 120 ECTS.

Table 3.2.

Structure of the *Podology* study programme

Number	**Study courses**	**Type of study courses**	**Study programme 80 CP** (120 ECTS)
1.	General education study courses with the included 6 CP (9 ECTS) module for development of business professional competencies	A	**20 CP,** (30 ECTS)
2.	Branch specific study courses		**36 CP** (54 ECTS)
2.1.	Compulsory study courses	A	*21 CP*
2.2.	Compulsory choice courses – vocational courses	B	*13 CP*
2.3	Free choice	C	*2 CP*
4.	Practice	A	**16 CP** (24 ECTS)
5.	Qualification work	A	**8 CP** (12 ECTS)

Study courses are reviewed every year, taking into account the results of student surveys, labour market trends and requirements in the field of education.
In accordance with Cabinet of Ministers Regulations No. 141 of March 20, 2001, On the State First Level Professional Higher Education Standard within the general education study courses include a module for the development of business professional competencies, which includes company organization, founding and management methods, project development and management basics, record keeping and financial accounting system, knowledge of social dialogue in society and labour

relations. Students acquire knowledge of this module in the study courses - Development of Entrepreneurship Professional Competences I - 2 CP (3 ECTS) and Development of Entrepreneurship Professional Competences II - 4 CP (6 ECTS).

Based on Article 23 of the Civil Protection and Disaster Management Law of the Republic of Latvia, the educational institution ensures teaching of a compulsory civil protection course to students in higher education. The minimum requirements regarding the content of the compulsory civil protection course are determined by the Cabinet of Ministers, therefore the study program Environmental and Civil Defense - 2 CP (3 ECTS) is included in the study programme.

The content of the study programme and the study plan determine the study courses to be acquired, their form, amount and distribution by semesters, in accordance with the LU PSK academic year plan. The lecturer of the programme develops a description of the study course for a specific course, sets the goals of the study course, the results to be achieved and determines the requirements for obtaining a positive study result and credit points. The results of the study courses are discussed every year in the Study Programme Council, involving lecturers of the programme to improve the content of the study course programme, review the results to be achieved and evaluation methods. For example, in 2018/2019, taking into account the results of student survey, the range of free choice study courses (Part C) in the amount of 2 CP (3 ECTS) was improved and expanded with two new study courses - Behavioral Medicine and Diagnostic Radiology Methods in Podiatrist Practice, as well as existing study courses - Aesthetic nail care and Basic Massage course - were improved, linking their content with current events in the industry. During the reporting period, arrangement of study courses within the semester was also updated in order to promote students' interest and reduce dropouts. Several branch courses were moved to the 1st study year. Taking into account succession of study courses, the first study year included study courses important for the development of a podiatrist's professional skills and competences - Endocrinology and Diabetology and Dermatology, which provide the necessary preliminary knowledge assessment of students' progress and quality of the study program in student surveys.

The main study forms in the implementation of the program for full-time full-time (2 years) and part-time full-time (2.5 years), in which the study course consists of:

- contact hours -75% of the study course volume,
- students' independent work - 25% of the study course.

During the reporting period, evaluating the students' recommendations, the Study Program Council decided to increase the number of contact hours in the field study course Practical Work Skills-2 in the amount of 80% of the study course, in other study courses the number of contact hours remains at 75%.

The study plan of the Podology study programme has two study practices:

- the first internship lasts 4 weeks, which corresponds to 4 CP (6 ECTS), and is organized at the end of the first study year,
- the second internship is planned as a qualification internship, at the end of the second study year in full-time studies (2 years) and in the third study year in part-time studies (2.5 years), the duration of the internship is 12 weeks, which corresponds to 12 CP (18 ECTS).

At the end of the studies, students take a state final examination, which consists of the development and defense of a qualification paper 8 CP (12 ECTS) and an integrated examination.

The professional education of a podologist is related to the development of special knowledge, skills and abilities, which are reflected in the study programme. The developed program is student-oriented, ensuring professional growth, promoting the student's ability to adapt and integrate into

the changing work environment, improving the student's attitudes and values.

The content of study courses follows from the aims of study courses and the results to be achieved, which in turn follow from the aim of the program and the results to be achieved. Interconnection of the program parameters with the goals of the study program and the results to be achieved is clearly reflected in the mapping of the study program (see Annex No. 65). For example, the tasks of the study program are: - To ensure the acquisition of students' professional knowledge and skills in podiatry to diagnose podiatric care for patients of all ages, identify high-risk patients, detect late complications of diabetes, detect early foot infections and provide qualified podological care ; To provide students with practical training in pre-clinical office and practice bases is reflected in the results of the study program in the form of knowledge and skills, achieving such competencies as the ability to assess and diagnose podological care care, including the care of the diabetic foot, by choosing the type of foot care appropriate for the diagnosis of podological care, plans and implements educational activities on the health of the foot skin and toenails.

The content of the study courses of the Podology study programme is updated in accordance with the requirements of health care industry and labor market, and the development trends of science.

LU PSK is the only college in Latvia that prepares medical foot care specialists - podologists. The study programme has all the necessary quality indicators (qualified lecturers, good material and technical base, well-established pre-clinical practice room and provided practice places under the guidance of professional podiatrists, as well as cooperation with foreign schools and teaching staff) to ensure study course content in line with labour market and industry development trends.

Compliance with the needs of the labour market and the development requirements of the sector is ensured by cooperation with the professional organization "Latvian Podiatric Society", and the largest employers - "Health Center-4", medical company "ARS", university clinics and regional hospitals. The need for podiatrists in the health care sector is assessed in the form of focus group discussions (employers, representatives of the professional association and the Study Council) and discussions.

To update the novelties in the field of podology in the content of the study course, the study programme has cooperation with the representative offices of pharmaceutical and professional foot care product manufacturers in Latvia. A large part of the podologist study process takes place outside the college - in health care institutions, which are accepted as clinical bases, using the medical and diagnostic equipment at their disposal, thus creating a link with the real work environment, which enables students to integrate into the labor market. This is also reflected in the results of the annual surveys of graduates - the majority of graduates (85% - 90%) work in the specialty.

Combining studies with work also provides an opportunity to implement the program in the form of part-time studies, which was not implemented in this reporting period, however, according to the recommendations of the professional association and employers, it does not lose its relevance.

During the reporting period, the teaching staff of the study programme has established cooperation with Latvian, European and world professional associations, unions and institutions, as a result of which the study programme is being improved and the experience of academic staff is enriched. For example, the State Education Development Agency (VIAA), the Latvian Nurses 'Association - the Diabetes Training Nurses' Association, the Latvian Endocrinologists 'Association, the Latvian Dermatologists' Association, the Central European Diabetes Association, *International Federation of Podiatrists, e.t.c*.

Compliance with scientific trends is ensured by the participation of lecturers in college, university and international scientific conferences, and the publication of research in scientific journals.

Students of the program are also involved in the performance of scientific work, who present their research results at the annual student scientific conferences of the college, inter-colleges and the University of Latvia, and at international conferences.

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 courses foreseen in the Medical Massage study program are implemented in accordance with the descriptions of the study courses, in which the course evaluation system is determined in accordance with Cabinet of Ministers Regulation No. 141 of March 20, 2001 *On the basic principles and procedures for the evaluation of higher education*, point 4 on first level professional higher education evaluation principles, as well as the procedure for the examination of the study courses of the LU PSK and the Regulations of the State Final Examination of the University of Latvia, which is applied to both forms of study program implementation - full-time full-time (2 years) and part-time full-time (2.5 years).

The study process in both forms of study program implementation is organized in LU PSK auditoriums, pre-clinic offices, laboratories, computer room and health care institutions on the basis of cooperation agreements. The main forms of study in the implementation of the study programme are contact hours and students' independent work.

In the study programme, contact hours are realized with the help of various forms of study organizations and teaching methods:

- Lectures - are used for teaching both general education and branch study courses, as well as professional specialization study courses. Within this, students are presented with theoretical questions, illustrated with practical examples.
- Seminars - are mainly used in the implementation of general education study courses, as a supplement to theoretical knowledge, which helps to develop skills and abilities to use the acquired knowledge, develops the ability to analyze the study literature and current problems in the respective study course. Seminars are organized in a group of 10-15

students.

- Practical work - is used in the implementation of study courses in the field and profession in order to strengthen knowledge, ensure the acquisition of skills specified in the study courses and promote the development of professional competence. To ensure the quality of acquisition of professional study courses, practical classes are organized in small groups of 6 - 8 students, the length of the class lasts from 3 - 6 academic hours. Practical work is carried out both in the college's pre-clinic offices and in health care institutions, where an experienced lecturer works with groups of students. In practical classes, students strengthen their skills and abilities to work with different groups of patients, working under the guidance of a lecturer. The organization of practical classes in the pre-clinic classrooms of the college and in the practical classrooms has both simulation devices, mugs and equipment in accordance with the requirements of the industry and the latest medical trends.
- Independent work - is organized both individually and in groups within all study courses in order to promote the creative use of knowledge and the acquisition of scientific cognitive methods; create experience of creative activity; as well as promoting independence and developing research skills.
- Group work, problem solving and analysis of clinical situations - are used in seminars, independent work and practical work, with the aim to develop cooperation, communication and decision-making skills, as well as to develop the ability to solve and raise the problem independently.

In the study process, guest lectures are also provided, attracting highly qualified local and foreign specialists. For example, long-term partners from Germany, angio-surgeons Gudrun Hetzel and Victor Lapikov, introduced students to innovative methods for controlling peripheral blood circulation in podiatric practices, while podologists Wolfgang Knörzer and Irina Gōting provided practical training in orthonyxia. Sandra Prāve, a phlebologist at the Mauriņš Vein Clinic, educated students about compression bonding technologies and their application in the podological care process.

Analyzing the forms of study organization and study methods used in the implementation of study courses in the reporting period, it can be concluded that interactive teaching methods based on mutual lecturer and student interaction play an important role in achieving the planned study results. Therefore, discussions, problem solving, role plays, group work and work group projects are most widely used in the study programme.

Various e-learning methods have also become relevant in ensuring the successful acquisition of study courses: video lectures, online lectures, online discussions and seminars, solving situations in the e-environment, etc., which at the beginning of the reporting period were used only in some cases but are now used daily. It should be added that the form of part-time studies (2.5 years) was not implemented in this reporting period, but no different teaching methods are planned for its implementation, taking into account the specifics of medical studies.

Acquisition of the Podology study programme is evaluated in accordance with the set goal and tasks of the programme. For successful acquisition of the study programme, students must attend all study courses and successfully pass intermediate examinations, tests, exams, pass practices and receive a positive evaluation in accordance with the regulations of the LU PSK. At the end of the study process, a qualification exam must be passed - defense of a qualification paper and an integrated exam.

Analyzing the evaluation of study implementation and assessment methods in the reporting period, it should be noted that the implementation of the study process is based on the principles of student-centered education, teaching and learning modern perspective, where the lecturer has a

coordinating role, whereas the formation of a student 's self - actualization is based on an environment that supports his affective and cognitive needs through implementation of different types of learning suitable for the student. In practical classes and group work such methods are used as learning by doing, cooperation, informal learning and self-analysis, as a form of assessment. In the study process, attention is paid to mutual cooperation and ensuring the feedback of study results in the acquisition of all study courses, therefore in the study process of podiatrists corrections were made in the succession of study courses, including several study courses in the first study year. Lecturers are encouraged to regularly evaluate and improve teaching methods and methods, receiving college support for the development of their skills in this field, for example, in continuing education courses organized by the University of Latvia - Didactics of the University: modern theories and practice; Development of academic staff competencies in the field of leadership, etc.

The student-centered approach is based on the student's independence, while ensuring both the management of the study process and student support. The description of each study hail indicates the scope and content of students' independent work, as well as its evaluation methods. LU PSK evaluation criteria and explanation of evaluations are available in the e-environment in the documents published on the college website.

The basic forms of acquisition of the Podology study programme are a test or exam, which must be taken at the end of each study course. The form of examination is determined in the study programme. Methods are used, such as tests, demonstration of skills and abilities, evaluation of practical activities, solving situation tasks, etc. Students are introduced to the expected result, the methodology of analysis of the results, the arguments on which the opinions about the main drawbacks or shortcomings in their work and their possible causes are based.

The evaluation of achievements of the students of the study programme is based on the criteria set in the state first level professional higher education standard:

- the principle of summing up positive achievements;
- the principle of mandatory assessment;
- the principle of openness and clarity of requirements;
- the principle of diversity of the types of tests used in the evaluation;
- the principle of adequacy of assessment.

Currently, the state examination in the study programme is organized in the form of an integrated oral examination, replacing the previously implemented written state examination test in podology, which includes innovative medical problems and reflection of technology application, thus strengthening both professional skills and innovative technology skills. creativity and demonstrate knowledge, skills and competence.

The assessment of qualification examinations is performed by the State Examination Commission, the assessment is applied fairly to all students and is consistent. Assessments both within the study courses and in qualification examinations are obtained by fulfilling the set requirements and receiving a positive assessment (not less than 4 points (almost average) on a 10-point scale).

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 practice is organized in accordance with the state standard of first level professional higher education. The internship is regulated by the internship regulations of P. Stradiņš Medical College of the University of Latvia and the tripartite internship agreement between the college, the student and the internship place. The total volume of practice is 16 CP (24 ECTS).

Table 3.3.

Reflection of the total amount of practice

Full-time studies	Part-time studies
1st study year (2nd semester) - 4 CP (6 ECTS)	1st study year (2nd semester) - 4 CP (6 ECTS)
2nd study year (4th semester) 12 CP (18 ECTS)	At the end of studies (5th semester) – 12 CP (18 ECTS)

A programme has been developed for the internship, which is introduced to the student and the head of the internship. The aim of the practice is to promote the application of the theoretical knowledge and skills acquired in the study process in practice and to promote the acquisition of professional competencies. Based on the content of the study programme, practical training of podologists is implemented in various health care institutions.

In the first study year, according to the amount of 4 CP (6 ECTS), the student acquires an internship in a foot care cabinet, within which he gets acquainted with the structure of the specific internship, work organization, and podological care of the patient under the supervision of the internship supervisor.

In the second study year, according to the amount of 12 CP (18 ECTS), during the practice the student must master the podological care process in a podiatrist's office, internship in the vascular surgery department, performing patient inspections, assisting in the wound care and dressing process, and a practice in the endocrinology department, performing patient medical history data collection, inspections and diabetic foot assessment tests.

The achievement of the tasks set within the internship is facilitated by the internship orientation lecture for students and informative material for internship supervisors organized in the study program. The internship supervisor is responsible for the internship process, in accordance with the internship program, promotes the achievement of the internship goals, coordinating them with the student's individual goals and internship opportunities. For example, one of the tasks of the internship supervisor is to advise students in practical work and, in accordance with the student's theoretical knowledge, to demonstrate the podological care process, analyze its course and possible situations, thus achieving the tasks set within the internship.

Evaluation of the practice is performed in accordance with the LU PSK “Procedure for organizing student internships”. Before the start of the practice, students are introduced to the purpose of the practice, the programme, tasks to be performed, procedure and evaluation procedures. After the end of the practice, the student submits a practice report and a review of the practice place within a certain period of time. To receive a successful assessment, the student must submit a completed

internship diary and an assessment from the student's internship place, as well as present an internship report in the Power Point program, including a description of the internship place.

The practice evaluation consists of practice supervisor's evaluation, the content of the practice diary and the practice presentation. The connection of the students' practice tasks with study results to be achieved in the study program is visible seen in table 3.4.

Table 3.4.

Linking tasks of the study programme practice with the results of the study programme

Results of the study programme **Tasks of study practices**	**1.** Link patient care philosophy and ethical principles to the patient stages of podological care	**2.** Apply foot care technologies and podological examination methods, and perform foot care according to the diagnosis of podological care	**3.** Choose foot care methods according to the diagnosis of podological care and evaluate the results of care	**4.** Able to evaluate the condition of the feet of patients of all age groups and determine the diagnosis of podological care, document the stages of the podological care plan	**5.** Is able to perform podological care, including diabetic foot care, choosing the appropriate type of foot care for the diagnosis of podological care	**6.** Is able to collaborate with other health care professionals and educate on foot injury prevention
To get acquainted with the place of practice, its goals and tasks	X					X
To strengthen knowledge and improve skills in arranging a podiatrist's workplace		X	X	X	X	
To acquire the ability to assess the patient's basic needs and functional abilities, to identify care problems (patient's general health condition, setting care priorities, setting the goal of care, care planning	X		X	X		X
To improve the ability to choose the appropriate materials and tools, to prepare the equipment necessary for the work, substantiating its necessity			X			
To strengthen the ability to independently perform foot examination, pulse test on A. dorsalis pedis, A. tibialis posterior and diagnostics with auxiliary devices: temperature sensing test with thermotype; sensory test with 10g monofilament, vibration sensing test with graduated tuning tone, document the results				X	X	
To strengthen the ability to independently perform a foot care procedure, which includes nail shaping, foot skin treatment, solution of podological problems, providing self-care instructions to the patient	X	X	X		X	
To strengthen the ability to independently perform nail treatment, preparation for correction, and ingrown nail correction.	X	X	X		X	
To improve the ability to recognize and treat mycotic foot skin and nail lesions, cracks, corns, warts, and make self-care recommendations to the patient		X	X	X	X	
To acquire the skill to choose foot care products, medications and dressings, as well as to know their application and recommendation to patients		X	X		X	

To improve the ability to observe work safety regulations when working with medical devices (podological equipment, instruments, disinfection, sterilization equipment)		X		X		

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 choose the topic of their qualification paper in accordance with the *Procedure for Development, Submission and Presentation of the Qualification Paper Developed* by the LU PSK. The student has an opportunity to offer a topic of his / her choosing based on his / her knowledge and professional skills. If necessary, the student can consult with the teaching staff of the programme about topicality of the theme. Qualification work must be related to professional qualifications, applied and practically applicable in a professional environment. After choosing the topic of the qualification paper, a supervisor of the qualification paper is appointed.

The selection of the topics of the qualification papers developed and defended during the reporting period reflects the development trends of the podiatry industry, labor market demands and medical science. At the beginning of the reporting period from 2013/2014 and throughout academic year 2015/2016 the topics of qualification papers have reflected such topical research problems in the field of podiatry as: Factors and prevention of late complications of patients with type II diabetes; Foot deformities and mycoskeletal changes; Peculiarities of podological care for children; Cooperation between a family doctor and a podiatrist in the care of patients with type 2 diabetes; Specifics of the podiatrist's work in the care of seniors' feet in urban and rural areas, Onychomycosis as a causative agent of secondary infection in diabetic patients, etc., which reflect the need for podological care for different patient groups, and cooperation with a health care team.

In turn during academic year 2017/2018 research topics are related to the development of mutual cooperation of study programmes, involving lecturers of the Biomedical laboratory technician study programme in the management and review of qualification papers, defended works: Impact of Coxsackievirus on foot health; Microbiological environment in the podiatrist's practice room; Nail growth disorders caused by iron deficiency anemia, etc., and LU PSK 2017 scientific research project Evaluation of the need for medical foot care in social care institutions. Defended qualification papers: Clients' foot problems in Latgale region social care institutions; Nail and skin lesions in patients with osteoarthritis.

At the end of the reporting period, in connection with topicality of infection control in the industry and society in general, topics on the mechanism of infection control and infection risks in podiatrist practices were announced. For example, the qualification paper Risks of Hospital Infections in Podology practice was presented in study year 2020/2021, at the College International Interdisciplinary Scientific Conference “Professional Competences in the Age of Modern Medical Technology Innovation III”. At the presentation of the qualification paper, the work was evaluated

with the highest mark - “excellent”.

Each year students present their research topics at local and international conferences. Topics reported at international conferences: Application of podological scalpel in practice; Psoriatic nail prosthesis with Hellmut Ruck Pedique material; Risk of wrist overload in the work of a podiatrist; Care of feet affected by psoriasis, etc.

Several students have linked topics of their qualification papers to their employment and intentions of further education, for example: Professional activities of podiatrists after graduating from medical college; Specifics of podology work in Germany; Mobile podiatrist services in the regions of Latvia, etc. The author of the qualification paper on Foot Care Habits in a Special Primary Boarding School has established a medical institution A. Āboltiņa Foot Clinic in the Technical Aids Center with the aim to pay attention not only to maintaining the health of adults, but also children and youth. The clinic offers both internship opportunities for students and has created jobs for young podiatrists.

The qualification works of the Podology study programme reflect research on innovative methods in medicine and their practical application in podology, for example: Application of Fox laser therapy in the treatment of mold nail fungus; Application of laser technology in foot treatment; The most commonly used orthonyxia methods in Latvia; Use of silver ion-containing products in podiatry practice; Use of platelet-rich plasma and fibrin in the care of diabetic ulcers, etc.

During the reporting period, 252 qualification papers were developed and defended in the study programme (Table 3.6). Evaluation of qualification papers in the Podology study programme in academic years 2013/2014-2019/2020 is reflected in table 2.4. Evaluations for the current study year are not included in the statistics. Evaluation data shows that the majority of students' qualification papers are evaluated as: good - 17.8%, very good - 16.3%, excellent - 26%, several papers receive an excellent evaluation in each academic year - 12.5%, mostly achieving a high and very high level of final work.

Table 3.6.

Evaluation of qualification works of the *Podology* study programme

Evaluation on a scale of 10 points	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Presented works**
Study year								
2013/2014	3	5	5	5	4	4	4	30
2014/2015		1	3	3	4	7	3	21
2015/2016	1	1	3	2	5	6	6	24
2016/2017	1	5	5	4	4	3	3	25
2017/2018	1	2	3	4	6	7	7	30
2018/2019	4	3	3	9	7	16	1	43
2019/2020	3		5	10	4	11	2	35

The topics of the Podology study programme qualification works fully correspond to the content and requirements of the study programme, as well as the current issues of the modern labor market.

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 main source of funding for the Podology study programme for the study process is the state budget funding and self-financing.

Lectures for students can be provided in well-equipped auditoriums, pre-clinical offices (procedure technique room, emergency room and massage room) and practical training rooms consisting of a dressing room, a sterilization room, a material preparation room and a podological manipulation room.

Partial reconstruction of the study building performed in 2012 (within the framework of EU funds and college financing) as part of improving of material technical basis, is regularly upkept, by supplementing and renewing equipment in 3 auditoriums, podology practice room – 2 podology offices and a sterilization room. The addition of material and technical base is reflected in table 3.7. Between 2015 and 2019, pre-clinical and treatment rooms were equipped with 55-inch monitors and computers with internet access for audio-visual display of how manipulations should be performed in accordance with industry standards, thus complementing the learning process with learning conditions for cognitive manipulations.

The premises of the study programme are equipped according to their use, the facilities are technically well equipped - all classrooms are equipped with multimedia projectors, which are connected to computers for visualization of study material and internet connection, internet (wireless) connection is available in all rooms. In turn, the academic staff is provided with workplaces, computers for planning, organizing and controlling of study process, internet connection and equipment for printing the materials necessary for the organization of the study process for printers. Every year, computer equipment and software required to ensure the study process is improved and supplemented.

Table 3.7.

Supplement to the material and technical base of the Podology study programme in the reporting period

Number of units	Organization of practical classes
1	ergonomic Ruck, the latest generation master chair
1	autoclave MELAG EUROKLAV 29VS
2	podological apparatus RUCK Podolog NOVA,
1	lower torso amputation mannequin,
1	foot mannequin
2	combined Afrodite Lojers treatment chairs,
1	Slimline LED magnifying lamp,
1	Doppler Elite 100 with probe S / NEAQ1423
2	Distillation apparatus

	Digitalization of pre-clinical facilities
1	55 inch monitor and a computer with internet connection

From the spring of 2020, the facilities provided by the Microsoft Office365 platform have been implemented at the University of Latvia. Academic staff and students have access to an interactive environment, in which it is possible to additionally organize the learning process, also using the interactive Microsoft TEAMS platform.

Students of the programme make use of the LU PSK IT offices, with 18 workplaces for students and 1 workstation for a lecturer equipped with a multimedia projector, foreseen for acquisition of Applied Informatics in Medicine course.

Study literature and periodicals corresponding to the field in Latvian, English, German and Russian are provided by the Library of the LU PSK, moreover, a book relevant to the field is purchased every year. For example, the podology literature available so far, which was mainly available in German (related to the history of the industry in Europe), has been supplemented in recent years by books in English, taking into account students' views and language skills - *Armstrong, D., Lavery, L. A., 2016. Clinical care of the Diabetic Foot. USA: American Diabetes Association. 144 p*; *Niedrau, A., 2018. The Big Book of Nail Diaseases. Germany: Neurer Mercur, 251 p; Singal, A., et al. 2019. Nail Disorders. USA: CRC Press, 536 p; Baran, R., Rigopoulos, D., 2019. Nail Therapies. USA: CRC Press, 139 p u.c.,* un krievu valodā - *Нидерау А., (2015). Заболевания ногтей. Издательство СПБГЭУ, 231 стр. u.c.*

Students have access to the EBSCO database, the resources of which can be used both in person and remotely. The library has an active subscription to industry magazines PODOLOGIE with a practical supplement PODOLOGIE PRAXIS in German.

In general, the resources and provision of the study programme correspond to the conditions and results of the implementation of the objectives of the study programme, as attested by student survey, with an average of 86% of positive reviews. Regular addition of material and technical base ensures achievement of high-quality planned study results.

In part-time studies, resources and provision are the same as in full-time studies. However, part-time studies were not implemented during the reporting period.

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 financial resources of the College consist of three sources: funding of the Ministry of Education and Science of the Republic of Latvia for the implementation of study programmes, income from paid services and other income of the College, projects financed by European Union organizations and other international organizations. In the Podology study programme, full-time studies the main source of funding are the funds of the Ministry of Education and Science of the Republic of Latvia for the implementation of study programmes and student self-financing and in part-time full-time study funding is provided by students self-financing. The basic costs of a study place in the Podology study programme, budget financing per student are 1630.11 EUR and self-financing is 2000 EUR. The real costs of the study programme per student are shown (table 3.8.). Funding for full-fledged implementation of the study programme is obtained from the college's income and projects financed by European Union organizations and other international organizations. The minimum number of students to ensure the profitability of the study programme is 15.

3.8. tabula

Cost calculation of the Podology study programme

Salary per one study place	Employer's compulsory state social insurance contributions per one study place per year	Cost of business trips and travel per one study place per year	Service costs per study place per year	Costs of materials, energy resources, water and inventory per study place per year	Cost of purchasing books and magazines per student per year	Equipment purchase and modernization costs per study place per year	**Cost per study place**
1430.8	337.52	23.04	165.77	87.57	7.99	19.7	**2072.4**

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.

Qualification of the teaching staff involved in implementation of the *Podology* study programme study courses complies with the requirements of regulatory enactments and the strategic goals set by the college. 25 lecturers are involved in implementation of the study programme, 14 of which are academic staff (elected in LU PSK) and 11 invited lecturers. One lecturer with a doctor's degree in medicine, 1 lecturer with a doctor’s degree in pedagogy, 19 lecturers with master’s degree and 3 lecturers with a bachelor’s degree, as well as 1 lecturer with first level higher education.

2 lecturers have completed doctoral studies in pedagogy and education management during the reporting period. A. Koha and T. Ivanova and are continuing to develop their doctoral thesis.

In realization of the “Podology” study programme basic courses 27 CP (40,5 ECTS) or 50% are implemented by the academic staff of the college and 27 CP (40,5 ECTS) or 50% by invited

lecturers (excluding free choice study courses, qualification work management).

The qualification acquired by the teaching staff plays a very important role so that the students can acquire a wide range of knowledge and versatile skills, achieve study results under the guidance of lecturers and develop professional competencies. Therefore, lecturers follow the improvement of their qualification not only in the academic but also in the professional field. For example, docent M.Saulīte obtained a doctoral degree in pedagogy in the reporting period, as a result of which the range of teaching methods used in several study courses (Research, Practical work skills in podology-2, Nail correction methods) was diversified and innovative orthonixia technologies were acquired by partners (H.Ruck Akademie) in Germany, acquiring the right to receive training in orthonxia developed by H.Ruck (instructor status) in the European Union, as a result of which the acquisition of Goldstat Classic orthonixia clamps was included in the study course Nail correction methods. Most of those involved in the study program are professionals in their respective fields, who specialize in their respective professional field and have worked for a long time, or work in related professions, thus ensuring the quality of the study results to be achieved. In addition, the teaching staff involved in the implementation of the study program has a higher pedagogical education, a master's or doctoral degree in educational science, allowing to ensure the link between practice and science, and the involvement of students in research.

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.

Table 3.9.

Number of teaching staff involved in realization of the Podology study programme

Post	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021
Associate professor	1	1	1	1	1	2	3	5
Lecturers	12	13	10	10	11	11	13	9
Assistants	-	-	-	-	-	-	-	-
Teachers	9	8	8	13	14	15	13	11
Altogether	22	22	19	24	26	28	29	25

During the reporting period, significant changes have been observed in the composition of the teaching staff implementing the study courses in the Podology programme

- The number of elected docents in the academic staff has increased from 1 to 2 starting academic year 2018/2019 from 2 to 3, starting academic year 2019/2020 and from 3 to 5 starting academic year 2020/2021. Lecturers with a doctor's degree in medicine, for example, J. Pupure, docent with a doctor’s degree in pedagogy, for example M. Saulīte are involved in realization of the programme. These lecturers have the necessary knowledge and skills in research, which allows students to develop research skills within the study course.
- The number of lecturers has decreased from 11 to 9, due to the fact that 2 lecturers were elected docents.
- The number of elected lecturers during the reporting period has remained at an average of 13 teachers, which forms the core of the programme implementers, thus contributes to stability, and allows for faster implementation of the latest solutions in the long-term

development of the program.

- In comparison to academic year 2014/2015 and 2017/2018 the number of invited lecturers has significantly increased from 8 to 14. The percentage of teaching staff involved in the study programme - the academic staff vs the invited lecturers in 2015/2016 is as follows: 58% are academic staff and 42% are guest lecturers. Starting academic year 2016/2017 there has been a slight tendency of decrease in percentage of academic personnel vs invited lecturers in realization of the study course, where on average 46% are the academic staff, but 54% invited lecturers, whereas 2019/2020, 2020/2021 there is a positive tendency – academic staff 56% and invited lecturers - 44% .

The results of the analysis of changes in the teaching staff show that due to the specifics of the study programme, more specialists practicing in clinics and industry professionals are attracted to the teaching staff, which increases the professional quality of the programme and improves the employment link of young professionals. However at the same time this may pose a risk to long-term development of education, as the professionals involved may not have an academic degree. These risks are mitigated by the inclusion in the academic composition of lecturers of branch and professional study courses who have obtained a bachelor's, master's and doctoral degree in education and / or medical science in parallel with podological qualification, thus ensuring compliance of study staff qualification to the conditions for implementation of the study programme and requirements of regulatory enactments, at the same time ensuring achievement of the programme and corresponding study courses. For example, the professional study courses Nail Correction Methods, Practical Work Skills in Podiatry II are implemented by a certified podologist M.Saulīte, who has a master's degree in education science and a doctor's degree in pedagogy, and who was elected an assistant professor during the reporting period. The study courses of the branch - General Medicine I and II are taught by a certified nurse A.Koha, who has a bachelor's degree and a master's degree in educational science, as well as completed doctoral studies in educational management science. The attracted lecturers are also highly qualified specialists in the field with appropriate academic degrees in education. For example, the professional study courses Practical Work Skills in Podology I and Diabetic Foot Care are taught by a certified podologist T.Ivanova, who has an academic master's degree in pedagogy and completed doctoral studies in 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).

In implementation of the Podology study programme, cooperation of teaching staff is promoted by following and reviewing the succession of study courses. Meetings of the teaching staff are organized at the sessions of the Study Programme Council of the Department of Medical Technologies, in which the results to be achieved and the content of the study courses are discussed, thus preventing duplication of study courses. Cooperation of the teaching staff between the study programmes of the Department of Medical Technologies is realized in the development of students' qualification papers, management of internships and teaching of study courses.

The mutual cooperation of the teaching staff takes place not only within the Department of Medical Technologies and the whole field of health care, but within the college as whole. During the reporting period, the teaching staff of the study programme also taught study courses in the field of Social Welfare, for example, in the study year 2017/2018, lecturer A. Svempe implemented a cycle of medical foot care within the framework of the integrated study course Health Care, educating social caregivers about foot care for at-risk patients in SAC institutions. During the reporting period, extracurricular activities of the Department of Social Care were also organized. For example, as a result of cooperation of lecturers I.Vīksniņa and M.Saulīte, social care seminars were organized within the framework of World Diabetes Day, demonstrating diabetes patient foot care. Lecturer of professional study courses T.Ivanova trained social caregivers to work in the provision of Samaritan mobile services within the framework of the International Scientific Conference of the University of Latvia P. Stradiņš Medical College “Quality of Health Care and Social Welfare - EDUCATION AND PRACTICE.

It can be concluded that evaluation of cooperation of the teaching staff of Podology study programme corresponds to the strategic goal of the healthcare direction - *To use the potential of the academic staff of the University of Latvia and the study technical base to increase the quality of all study programmes*.

Relation between the number of students and the number of lecturers within the study programme for academic year 2020/2021 are reflected in table 3.10.

Table 3.10.

Ratio of the number of students and lecturers in the Podology study programme

Number of students in academic year 2020/2021	Number of teaching staff in academic year 2020/2021	Ratio

60	25	**2,4**

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_61_Sample_Of_The_Diploma_To_Be_Issued_In_The_Study_Program_Pogology.pdf	61_P_Studiju_Programmas_Podoloģija_Izsniedzamā_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	ANNEX_62_Statistics_On_Students_In_The_Reporting_Period_In_The_Study_Program_Podology.pdf	62_P_Statistika_Par_Studējošajiem_Studiju_Programmā_Podoloģija.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_63_Compliance_Of_The_Study_Program_Podology_With_The_State_Education_Standard.pdf	63_P_Studiju_Programmas_Podoloģija_Atbilstība_Valsts_Izglītības_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)	ANNEX_64_Compliance_Of_Professional_Qualification_Attained_In_Podology_Study_Programme_With_Professional_Standard.pdf	64_P_Studiju_Programmas_Podoloģija_Kvalifikācijas_Atbilstība_Profesijas_Standartam.pdf
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)	Compliance_Podology_Study_Programme_With_Industry-specific_Regulations.pdf	Studiju_Programmas_Podoloģija_Atbilstība_Nozares_Specifiskajam_Normatīvajam_Regulējumam.pdf
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	ANNEX_65_Mapping_Of_Study_Courses_For_Achieving_The_Study_Results_Of_The_Study_Program_Podology.pdf	65_P_Studiju_Programmas_Podoloģija_Studiju_Kursu_Kartējums.pdf
The curriculum of the study programme (for each type and form of the implementation of the study programme)	ANNEX_66_Study_Plan_Of_Study_Program_Podology.pdf	66_P_Studiju_Programmas_Podoloģija_Studiju_Plāns.pdf
Descriptions of the study courses/ modules	ANNEX_67_Descriptions_Of_Study_Courses_In_Study_Program_Podology_Full-time_Part-time_Studies.pdf	67_P_Studiju_Programmas_Podoloģija_Studiju_Kursu_Apraksti_Pilna_Nepilna_Laika_Studijās.pdf
Description of the organisation of the internship of the students (if applicable)	ANNEX_68_Study_Programs_Podology_Student_Practice_Organizations_Description.pdf	68_P_Studiju_Programmas_Podoloģija_Studējošo_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)		