

## APPLICATION

### Study field "Manufacture and Processing" for assessment

Study field	<i>Manufacture and Processing</i>
Title of the higher education institution	<i>Rēzeknes Tehnoloģiju akadēmija</i>
Registration code	3146001444
Legal address	ATBRĪVOŠANAS ALEJA 115, RĒZEKNE, LV-4601
Phone number	+371 28325368
E-mail	rta@rta.lv



## **Self-evaluation report**

Study field "Manufacture and Processing"

Rēzekne Academy of Technologies

<b>Self-evaluation report</b> .....	2
<b>Study field</b> .....	4
1. Information on the Higher Education Institution/College .....	4
2.1. Management of the Study Field .....	10
2.2. Efficiency of the Internal Quality Assurance System .....	23
2.3. Resources and Provision of the Study Field .....	31
2.4. Scientific Research and Artistic Creation .....	48
2.5. Cooperation and Internationalisation .....	59
2.6. Implementation of the Recommendations Received During the Previous Assessment Procedures .....	64
<b>Annexes</b> .....	67
<b>Other annexes</b> .....	69
<b>Fashion Design and Technology (41542)</b> .....	70
<b>Study programme</b> .....	73
3.1. Indicators Describing the Study Programme .....	73
3.2. The Content of Studies and Implementation Thereof .....	78
3.3. Resources and Provision of the Study Programme .....	87
3.4. Teaching Staff .....	89
<b>Annexes</b> .....	95
<b>Food processing (41541)</b> .....	96
<b>Study programme</b> .....	99
3.1. Indicators Describing the Study Programme .....	99
3.2. The Content of Studies and Implementation Thereof .....	103
3.3. Resources and Provision of the Study Programme .....	112
3.4. Teaching Staff .....	114
<b>Annexes</b> .....	121

# 1. Information on the Higher Education Institution/College

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

RTA was founded in 1993 under the name of Rezekne Higher Education Institution with the aim to develop culture, education and science in Latgale region and throughout Latvia. In 2016, Rēzekne Higher Education Institution changed its name to Rezekne Academy of Technologies, respecting its academic and scientific capacity development indexes, implementing the goal defined by its Constitution - to provide students with academic and professional higher education that is competitive in the European education space and complies with the level of scientific development and Latvian cultural traditions, by developing regional studies and research.

RTA vision in line with [RTA operating and development strategy 2016-2023 \(RTA Strategy\)](#) is to become an internationally competitive Academy of Technologies in the space of European higher education and science integrated with engineering, social sciences and humanities with motivated and creative students that are demanded in the labour market and an open, dynamic academic and scientific environment for sustainable development of the community.

RTA mission is to contribute to the transformation and growth of society and economy through education, research, science and innovation providing new products and technologies in the scientific fields and interdisciplinary fields represented by RTA both nationally and internationally.

The long-term goal set in the RTA Strategy is to strengthen RTA strategic role in Latgale region, in the system of Latvian and European higher education and scientific institutions, positioning itself as an academy of technologies focusing on the development, acquisition, research, popularization and application of multidisciplinary technological solutions.

In the academic year 2021/2022 RTA study process is implemented in 3 faculties, 12 study directions and 37 study programmes (see Table 1.1.) at all study levels - from first level professional higher education to doctoral study programmes.

Table 1.1.

### Study directions implemented at RTA

<b>Faculty of Engineering (FE)</b>	<b>Faculty of Economics and Management (FEM)</b>	<b>Faculty of Education, Languages and Design (FELD)</b>
------------------------------------	--	--

<ul style="list-style-type: none"> <li>• "Architecture and Construction"</li> <li>• "Information Technology, Computer Engineering, Electronics, Telecommunications, Computer Management and Computer Science"</li> <li>• "Mechanics and Metalworking, Heat Power Industry, Heat Engineering and Mechanical Engineering"</li> <li>• "Production and processing"</li> </ul>	<ul style="list-style-type: none"> <li>• "Management, Administration and Real Estate Management"</li> <li>• "Internal Security and Civil Defence"</li> <li>• "Law"</li> <li>• "Economics"</li> </ul>	<ul style="list-style-type: none"> <li>• "Social Welfare"</li> <li>• "Arts"</li> <li>• "Education, Pedagogy and Sport"</li> <li>• "Translation"</li> </ul>
---	--	--

RTA study and research infrastructure are located in Rezekne at Atbrivosanas aleja 115. Some study programmes are implemented at RTA branches in Madona and Livani, which were established at the request of Madona and Livani municipality in order to support the preparation of qualitative workforce in accordance with regional development strategies. Since 2017 study programmes are not implemented in Madona, but Livani branch is implementing first level professional higher education study programme "Mechanical Engineering", which is in line with Livani county development strategy and is aimed at training and employment of specialists in local enterprises.

In 2015 RTA founded Eastern Latvia High School of Technologies, where the general secondary education programme is implemented in STEM fields in order to promote the purposeful and systematic preparation of students for studies in science, technology, engineering and mathematics.

Number of students at RTA from 2013 to 2021 show some degree of persistence (see Table 1.2.)

Table 1.2

### The dynamics of the number of students at RTA 2014-2021

Study year	2014	2015	2016	2017	2018	2019	2020	2021
Number of students	1851	1807	1876	1881	1753	1632	1650	1489

According to the statistics data 2020 of the Ministry of Education and Science, RTA is the 6th largest higher education institution among 16 state universities and the 10th largest among 29 state and

private education institutions.

RTA operates in accordance with the RTA strategy, strategy, which defines its main strategic objectives:

- 01.** To ensure purposeful, coherent and successive implementation of STEM and resource-intensive study direction geared towards the development, acquisition and application of innovative technologies in Latgale region by preparing specialists necessary for Latgale, Latvia and European economic growth, promoting the involvement of young specialists in science and research.
- 02.** To offer science-based, interdisciplinary study programmes focused on the acquisition, application and development of innovative technologies, attractive and modern study and research environment, preparing competitive professionals for regional, national and international job markets and enhancing study quality.
- 03.** To implement the principle of unity of pedagogical and research work, to develop the scientific research capacity of RTA academic staff, ensuring technological excellence and transfer for the development of business environment and national economy.
- 04.** To create a modern and sustainable RTA infrastructure complex and modern equipment particularly developing STEM and resource-intensive directions for fundamental and applied research, excellent study environment and innovation support.
- 05.** To develop the attractiveness of the region by involving academic staff and students of RTA in the social, cultural and economic life of Latgale, sustainable use of resources, preservation and circulation of the region's cultural and historical values.

Each objective has tasks and main short-term (until 2019) and long-term (until 2023) outcomes.

## **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.**

In accordance with the [RTA Constitution](#), RTA is an autonomous educational and scientific institution with self-governing rights. Its autonomy is expressed in the right to freely choose the types and forms of implementation of tasks set by RTA founder that are in compliance with the [Law on Higher Education Institutions](#), as well as in responsibility for the quality of education provided by RTA, purposeful and rational use of financial and material resources, observance of the principles of democracy and the laws regulating the activities of higher education institutions.

RTA has the right to draft and adopt RTA Constitution, to form RTA staff, independently determine the content and forms of study programmes, student enrolment regulations, basic directions of scientific research work, RTA organizational and management structure, pay wage rates not lower than those set by the Cabinet of Ministers and to do other activities that do not contradict the principles and tasks set by the RTA founder and the [Law on Higher Education Institutions](#). See the RTA management structure in Annex 2.

The main RTA institutions involved in the decision-making process are the Constitutional Assembly, the Senate, the Student Council, the Study Council, the Science Council, the Faculty Council, the Study and Direction Council. See Table 1.2.1 for their composition and description of their powers.

**Main RTA bodies involved in RTA decision-making process**

RTA decision-making bodies	Structure of the institution	Power of the institution
Constitutional Assembly	39 representatives of academic staff, 9 general staff and 12 students.	Adopts and amends the regulations of the RTA Constitutional Assembly and accordingly adopts and amends the RTA Constitution, elects RTA Senate, approves or amends RTA Senate regulations, revokes RTA Senate members, elects and dismisses RTA Rector, hears RTA Rector's report, elects RTA Academic Arbitration court, approves its regulations, as well as considers other issues of RTA in accordance with the regulations of RTA Constitutional Assembly.
Senate	19 representatives of academic staff members, 1 general staff member and 5 students	Approves the rules and regulations governing all areas of RTA.
Student Council	21 student representatives - 7 from each faculty.	Represents RTA students' interests in the study, science and culture issues participates in the work of RTA institutions (Constitutional Assembly, Senate, Academic Arbitration Court, Faculty Council, Scholarship Commission, Credit Granting Commission, Study Program Self-Evaluation Preparation Working Group), develops and implements projects related to students' interests.
Study Council	Vice-Rector for Studies and Science, Head of the Study Department, Deans, one Head of the Faculty, Deputy Rector for Cooperation and Development, Head of the Lifelong Learning Centre, Head of the Academic Direction of the Student Council	Analyses the study system and determines its improvement and development directions. Evaluates academic and professional study programmes and controls their content and quality. Analyses study budget projects and their implementation. Researches and introduces Latvian and foreign experience in the field of higher education.

Science council	RTA Rector, Vice-Rector for Studies and Science, Deans of Faculties, Heads of Institutes, Project Coordinator, Head of Science Department and Head of Library, Academic Director of the Student Council	By assessing the scientific potential of RTA, the material and financial resources to be used for research, the interests of the research community and individual scientists, it identifies the main directions of research and, through the opportunities available to RTA, facilitates the involvement of scientific and academic staff.
Faculty Council	The Dean of the Faculty, the professors and associate professors elected by the Faculty and RTA, the heads of study directions of the respective faculty, the student representatives, whose proportion in the Council shall not be less than 20% of the composition of this Council.	Defines the basic directions and principles of the development of studies, scientific activities and material and technical base in the faculty. Develops the faculty development concept and controls its implementation. Elects the Dean and heads of the structural units of the faculty. Approves study plans. Approves changes to the content of the study programme if they do not exceed 20% of the content of accredited study programme. Approves and controls the financial estimates of the faculty. Evaluates and directs study field self-evaluation reports, licensing / accreditation materials for approval to the Study Council. Decides on the organizational issues of the faculty scientific and academic conferences. Approves the proposals of the study directions regarding the composition of state and final examination commissions and time of these examinations.
Study Direction Council (SDC)	Directors of the study programmes and modules	SDC plans, coordinates and promotes scientific activities, the development of SD studies and scientific infrastructure, the activities of SDC in the study, research and other projects for the development of the study direction. SDC decides on the main issues of SD study, methodological, scientific and organizational activities, development of study programmes/modules, making significant changes in the study programmes, organization of internships, methodological and organizational provision and management of study research, regular, final and state examinations, planning, preparation and publishing of scientific literature, ensuring self-assessment of SV, co-operation with employers, Latvian and foreign institutions in the field of studies and research, promotion of SD and study programmes in society.

List of RTA laws and regulations, see Annex 1.

**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.**

RTA quality management system is maintained based on the priorities in higher education set forth in the European Higher Education Standards and Guidelines for Quality Assurance and the Higher Education Act. Quality processes at RTA are monitored by a quality management system specialist who is responsible for analysing, developing, implementing and maintaining the RTA quality management system.

RTA's Quality Management System (QMS) has been developed in line with the Excellence model taking into account the Standards and Guidelines for the Quality Assurance in Higher Education Area elaborated by the European Foundation for Quality Management (EFQM) and ISO9000: 2015 standard recommendations. RTA quality policy is aimed at RTA mission, sustainable development and achievement of strategic goals by providing high-quality study process and scientific work that meets standards and regulatory requirements. RTA has approved QMS implementation plan till 2020, which is fulfilled. RTA has developed and implemented all procedures related to study quality management, supervision and improvement. Since 2005 there is a **study quality management system** in RTA that covers all major areas of study work: compliance of study process with RTA development strategy, academic staff, study program, study process, infrastructure, financing, etc. quality aspects.

**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 RTA Quality Handbook, which also covers the RTA quality policy, is available on the RTA DMS. <a href="https://ieej.lv/byUWJ">https://ieej.lv/byUWJ</a> RTA study quality management system
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.	Regulations on academic and professional studies and study programmes at RTA, Annual self-evaluation system of RTA study directions and study programmes Expert councils of RTA study fields have been established

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.	There has been developed study quality system based on learning outcomes, Regulations on study course exams and tests, Regulations on state and final examinations. Available on RTA website, in RTA Student Manual
4.	Internal procedures and mechanisms for assuring the qualifications of the academic staff and the work quality have been developed.	RTA human resource development plan, academic personnel development guidelines, regulations on RTA lecturer procedure for evaluation of academic staff quality, professional development programme in higher education didactics or innovation in higher
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.	Student surveys, Annual study program self-evaluation reports, RTA annual reports
6.	The higher education institution/ college shall ensure continuous improvement, development, and efficient performance of the study field whilst implementing their quality assurance systems.	Annual study direction self-evaluation reports, RTA study direction expert councils

## 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 study field (hereinafter SF) "Production and Processing" at the Rēzekne Academy of Technologies (RTA) has been implemented since the study-year 2012/2013 with the first level professional higher education study programs (hereinafter SP) "Fashion Design and Technology", During the academic year 2016/2017 two new first-level professional education SP "Production

Logistics” and “Food Processing” were initiated.

The objectives of the SF are defined on the basis of the strategic planning documents of the EU and Latvia, Latgale region and the RTA: documents “Europa 2030”, European Higher Education System Modernization Program, “Latvia 2030”, “Latgale Strategy 2030” Education Development Guidelines 2021-2027, “RTA Operational and Development Strategy 2016-2023” (hereinafter – the RTA Strategy), as well as in consultation with students, employers, professional organizations and discussing in the SF Council, Council of the Faculty of Engineering, the RTA Study Council and the Senate, and others.

The RTA Strategy positions itself as a regional development center, where human resources and infrastructure are concentrated, so that all subjects of the innovation system - education, science and business - develop priority areas / directions for the region and the country, including engineering sciences and technologies.

The RTA Strategy envisages further development of [...] **production and processing** (food processing, industrial and clothing design and technology, production logistics), etc. STEM and resource-intensive industries based on the principle: science → innovation → prototyping → technology transfer → manufacturing.

The strategic direction of SF is coordinated with the goals and tasks of the Faculty of Engineering and the strategic goals of the RTA:

1. to ensure purposeful, coordinated and successive implementation of resource-intensive SF aimed at acquisition, application and development of innovative technologies in Latgale region, preparing specialists necessary for growth of Latgale, Latvia and European economy, promoting involvement of new specialists in science and research;
2. to offer research-based interdisciplinary study programs aimed at the acquisition, application and development of innovative technologies, an attractive and modern study and research environment, preparing competitive specialists for the regional, national and international labour market and increasing the quality of studies;
3. to implement the principle of unity of pedagogical and research work, to develop the scientific research capacity of the RTA academic staff, ensuring technological excellence and transfer to the development of the business environment and national economy;
4. to develop the attractiveness of the region by involving the RTA academic staff, students in the social, cultural and economic life of Latgale, sustainable use of resources, preservation and circulation of the region's cultural and historical values.

**Production and processing is an important RTA SF** for the national economy, which includes both the European Union (EU) and Latvia's important welfare-oriented sectors of the economy: **the manufacturing, textile and food industries.**

The goals of the SF correspond to the regional development, the requirements of the labour market, i.e. to ensure training system for demanded, competitive, sustainably thinking, flexible engineering specialists in the manufacturing industry in Eastern Latvia at both the regional and national level. The objectives of the SF are defined using the **brainstorming method and SWOT analysis**, involving stakeholders in the development of the SF: students, teachers, administration, as well as employers.

#### **SF common goals and objectives:**

1. To offer high-quality SP and studies in production and processing-related sectors and cross-sectors, to prepare competent, qualified specialists, suitable for labour market and economy demands for regional, national and international labour market, for operation and

competitiveness in changing socio-economic conditions, creating motivation for further acquisition of second level professional higher education and fifth level professional qualification.

Description and evaluation of the goal implementation process:

- Improving the content of SF SP in accordance with the requirements of the national economy's labour market, in accordance with the professional standard, in cooperation with internship providers, employers;
  - development of interdisciplinarity, establishment of international cooperation, expansion with Latvian and foreign higher education institutions to ensure the improvement of SP;
  - Development of SF, development of new integrated, interdisciplinary study programs and / or study modules that expand study opportunities for Latvian and foreign students, ensure full use of the academic potential of lecturers, ensuring successive acquisition of higher education.
2. To develop the scientific research activities of the academic staff, ensuring technological excellence and transfer for business development.

Description and evaluation of the goal implementation process:

- the link between research and the development of the sector, the development of technology transfer and innovation,
  - involvement in international projects, improvement of study quality and material and technical provision.
  - promoting the patenting of scientific results and the introduction of innovative products into production,
  - improvement of the content of study courses based on the research results of the academic staff, the latest findings in the theory and internship of the field and its related sciences;
  - promoting cooperation and partnership between business and academic research environments.
3. To create a modern SP implementation environment, to provide appropriate equipment for the study process and research work.

Description and evaluation of the goal implementation process:

- Use and improvement of ICT provision for studies and research work,
  - Establishment and development of a laboratory complex for the performance of SF-compliant research
  - Expansion of study opportunities in the e-learning environment,
  - Expanding library holdings and remote access to information.
4. Improving the quality of life in Latgale region with the involvement of academic staff and students in the social, cultural and economic life of Latgale.

Description and evaluation of the goal implementation process:

- Promoting the development of business with the knowledge, skills and level of competence in the field of applied technologies that meet the requirements of a modern production plant.
- Improvement of industrial design possibilities, product design, development of products to be introduced in production, promoting the growth of the manufacturing sector in Latgale region.

The implementation of the SF SP corresponds to the aim, tasks, RTA Strategy, development needs and development trends of the society and the national economy.

The corresponding SPs of the study field represent the branches of the national economy, which are recognized as important in the development planning documents of Latgale region. [Latgale 2030](#) (Latvian only) provides the following: ► In Latgale, food production will become an important part of the region's economic growth; ► Proximity to markets creates opportunities for organic food production; ► The **food industry and the textile industry** are developing. More and more new companies are being created that produce products with high added value. In the [Latgale Development Program 2021-2027](#), (Latvian only) the food production sector is recognized as one of the priority sectors of the Latgale Special Economic Zone ( p.57.) Latvian labor market development forecasts for 2040 predict that the largest shortage of labour force with professional (including higher) education is expected in the fields of [...] **food and textile production technologies and product manufacturing** (<https://www.em.gov.lv/lv/media/598/download> page 73.)(Latvian only).

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

The SWOT analysis of the SF in relation to the set goals has been developed in a self-assessment working group, involving students, academic staff and industry experts. It was reviewed and discussed at the meeting of the Council of SF “Production and Processing” (Protocol No. 2 of 19/10/2021)

#### **Strengths of the SF:**

- The requirements of state education and professional standards have been met;
- Compliance with the RTA strategy, which enables purposeful use of the Academy's intellectual and material resources;
- Attracted specialists working in the companies of the industry (production managers, leading specialists), lectures of the leading representatives of the industry are provided (VRUA NEP, LDS etc.);
- Developed cooperation with employers, industry companies that support students by providing internship places, the content of SP is improved in accordance with the recommendations of employers, a stable base of professional internships.
- In general, a sufficient proportion of academic staff with doctoral degrees is involved in the implementation of the SP, which ensures high-quality study content and scientific research;
- Students have the opportunity to get involved in solving practical problems in separate study courses, conducting custom research, approbating theoretical knowledge in internship, using the problem-based learning (PBL) method;
- The scientific journal “[Latgale National Economy Research](#)”, is published, available at freely accessible [journals.rta.lv](http://journals.rta.lv)
- International scientific conferences are organized: “Environment. Technology. Resources” (included in the SCOPUS database) and “Society. Integration. Education” (included in the

WebScience database), in which lecturers of the study field actively participate and publish scientific articles in conference proceedings (collections of articles);

- IF annual International student scientific-practical conference “Human. Environment. Technology”, where students present their research results (study papers, qualification papers), since 2018. The conference proceedings are freely available at journals.rta.lv;
- Teaching staff and students are involved in RTA, Latvian and international projects, research work and other activities promoting students' qualifications;
- Academic staff and students use ERASMUS + mobility opportunities, incl. postgraduate internships;
- Close cooperation with Latvian and foreign universities in the implementation of SP, for example, RTU and Lithuanian, Estonian (Vilnius, Kaunas, Utena, Tallinn) universities of applied sciences, etc.
- Material and technical provision fully complies with the requirements of SP, modern technologies and is constantly improved;
- Library equipped with SF industry requirements, with the possibility to remotely use its resources, availability of libraries, interlibrary borrowings and databases of scientific literature.
- State-funded study places.
- Successful implementation of distance learning (during the Covid-19 crisis).

#### **SF weaknesses:**

Limited opportunities to attract funding from private sector companies, given the impact of the current situation in the sectors;

- Insufficient number of students in SF programs.
- Narrow geographical representation of foreign teaching staff employed by SF (mainly Lithuanian teaching staff).
- SF programs do not ensure succession in studies at all levels of education, only first level programs are represented;
- The form of distance learning studies has not been introduced.
- The English language skills are still insufficient.
- There is still an insufficient number of elected lecturers with doctoral degrees in the SF sectors.
- Insufficient number of scientific publications of academic staff in SF fields, as well as in high citation index journals.
- Insufficient external funding to supplement laboratory equipment, facilities and latest software.
- Insufficient workload of academic staff in academic, scientific and administrative work.

#### **SF opportunities:**

- Involvement of regional enterprises, including enterprises founded by graduates, into SF SP implementation (lectures, internships, research).
- Continuous improvement of the content of SP in accordance with the demand of the labour market, if necessary - creation of new study modules demanded in the labour market.
- Improvement of the English language skills of the academic staff, improvement of professional experience through internships in companies in the field.
- Improving the digital and leadership skills of the academic staff in line with the paradigm shift in higher education.
- Increasing the number of lecturers with doctoral degrees, including by using doctoral study

programs and international projects implemented by the RTA.

- Participation of lecturers and students in scientific conferences, projects, shows-competitions outside Latvia, thus expanding the opportunities for cooperation and recognition of the RTA.
- Increasing the scientific citation index of the academic staff.
- More active opportunities for lecturers and students to use ERASMUS + mobility.
- Expansion of the range of study courses using the PBL method.
- More active involvement of students in research and creation of innovations.
- Development of e-learning and distance learning opportunities in SF-compliant SPs.
- Establishment of joint SP with foreign partners, increasing the number of students.
- Involvement in international and state-funded scientific projects, in larger consortia for the development and implementation of scientific projects (Sevor Horizon).
- Use of funding from international funds and grants for scientific research for academic staff.
- Use of the opportunities offered by the Rēzekne Business Incubator for graduates to establish their own companies and start a business.

### **SF threats:**

- Demographic trends (age structure and natural growth) in Latvia and Europe.
- Decrease in the number of students related to the demographic situation.
- Uncompetitive remuneration in the higher education sector.
- The existing infrastructure and laboratory base have to be supplemented; problems finding funding to expand it.
- Number of state-funded study places in SF in existing programs;
- Uneven socio-economic development of the territory of Latvia;
- Lack of support from some employers to combine students' work and studies;
- Unpredictability of changes in higher education governance and legislation.
- Adverse impact of the 2020 - 2022 Covid-19 pandemic on students, incl. involvement of a contingent of foreign students.
- Latvian tax policy may make it difficult to attract qualified specialists in a narrow field to read separate, specific, at the same time production-relevant courses (for the RTA it becomes economically unprofitable to hire people for a small workload).

In response to the weaknesses and threats of the program identified in the SWOT analysis, RTA has taken and continues to take measures to support the teaching staff in increasing the competencies of the distance learning process (see Section 2.3.4), looking for solutions and new technologies to ensure the quality of the distance learning process, including participating in international projects that envisage the development of innovative study technologies (virtual glasses) for work in laboratories (see Section 3).

In order to reduce the impact of directional weaknesses, the RTA:

- In order to improve the qualification of the teaching staff, the professional development program "Innovations in Higher Education" is implemented, which the teaching staff can acquire free of charge. Some study courses in this program can also be attended free of charge by SF experts.
- The Public Relations Department participates in exhibitions that offer higher education opportunities in Latvia, thus promoting SF programs;
- The External Relations Department regularly expands the geography of foreign partners, also within the ERASMUS + program;
- Since the 2020/2021 academic year, the number of ERASMUS + mobilities has been increased (4) in order to promote the integration of lecturers in the higher education space

and the visibility of the RTA;

- Covid-19 has significantly reduced international mobility in the SP. To improve the situation, an advertising campaign for virtual mobility has been launched until the epidemiological situation allows for a full resumption of international mobility activities.
- The offer of SP courses is developed in accordance with the recommendations of employers and the development of students' interests;
- The involvement of students and lecturers in research and contract work for research commissioned by the Ministry of Education and Science is promoted; for example, research commissioned by the SEA, Latvian Council of Science, etc. has been carried out, which facilitates the attraction of additional financial resources, provides practical scientific activities for students;
- In order to ensure the continuity of studies, a cooperation agreement has been concluded with the LLU, the RTU, which provides for the possibility to continue studies for obtaining a professional bachelor's degree (agreements in Annex 5).

The SF development plan was developed after the accreditation of the SF and is reviewed annually during the self-assessment of the SF. The Development Plan 2021-2027 was updated at the SF Council meeting on October 19, 2021 (see Annex 3). It contains current activities concerning the recruitment, planning and mobility of SF academic staff, research and student involvement in research, etc. planned measures (see Annexes 12,20,21,22 for SF development progress measures).

### **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.**

RTA study directions have been established in accordance with the list of study directions specified in the Cabinet of Ministers Regulations No.793 "Regulations on opening and accreditation of study directions" of 11 December 2018. The management of RTA study directions is regulated by the Regulations approved by the Senate "On study field councils"(Latvian only),("Par Studiju virzienu padomēm"), "On study program/ module/ specialization directors", ("Par studiju programmu/ moduļu/ specializāciju direktoriem"), "Study direction expert councils", ("Par studiju virzienu ekspertu padomēm"), "On faculty council"(Latvian only) ("Par fakultātes domi"). The most important collegial institutions involved in the administration of the study field are shown in Annex 4.

The management structure of the study field established by the RTA ensures such essential principles of the RTA internal quality as:

- **Involvement of staff** - all stakeholders are involved in the implementation of the SF - students, teachers, general staff, employers, graduates,
- **Evidence-based process management** - each unit has clearly defined duties, rights and responsibilities;
- **Continuous learning and improvement** - conditions are created for the exchange of knowledge, introduction of innovations and improvements.

The most important role in the implementation of the SF is assigned to the directors of the study program, who form the SF council, which is chaired by the head of the SF.

**Director of a study program:**

develops SP taking into account the demand of relevant specialists in the labour market, which is substantiated by surveys, statistical data and other documents substantiating the request, prepares SP for review in RTA collegial and advisory institutions, manages the self-evaluation process of the program, performs duties related to SP implementation (preparation of plans, coordination of the SP study results with study course study results, consultations for students and teaching staff, popularization of the SP) and settles other issues.

**Study Field Manager:**

plans the work of the SF Council, organizes, manages and prepares the process of preparation of SF self-assessment, licensing and accreditation materials, including the involvement of academic staff and students, organizes the evaluation of the activities of SP staff.

**Study Field Council:**

decides on all the main issues of teaching, methodological, scientific and organizational activities of the SF, including the development of SP / modules, making significant changes to the SP, organizing internships, methodological and organizational provision and management of current, final and state examinations, teaching methodological and planning, preparation and publishing of scientific literature, provision of self-assessment of SF and SP, cooperation with employers, LV and foreign institutions in the field of studies and research activities, promotion of SP in society, plans, coordinates and promotes scientific activities, development of studies and scientific infrastructure, study, research, etc. projects for the development of SF. On 27/01/2015 the RTA Senate approved the "[Regulations on Study Field Councils](#)" (Latvian only), by which also a new SF administration model was introduced, and a field council was established in the direction, which includes SP directors and program teaching staff.

**Study Field General Meeting:**

meets at least three times a year: at the beginning of each study semester and at the end of the academic year, nominates and approves the composition of the SF Council by the majority of votes present, evaluates information on current SF implementation measures and tasks, evaluates the SF manager's report on semester and academic year, evaluates the reports of the academic staff on the performance of workload.

For the efficient operation of the SF, the following staff of the support units operates in the RTA:

- **Specialists of the study process of the Faculty of Engineering:** responsible for record keeping and organizational issues of the study process at the faculty level. Specialists of the study process of the study department: responsible for maintaining the SF data in LAIS, VIIS, Moodle systems, Multirank, planning of workload of academic staff, maintenance of the list of classes, preparation of diplomas and diploma supplements, preparation of reports, etc. preparation of documents on study issues.
- **Personnel department specialists:** prepares personnel documentation (incl. the employment contract), performs introductory instruction of personnel.
- **Lifelong Learning Center staff:** organizes professional development courses in higher education institution didactics and innovation.
- **Library:** participates in the planning of study and scientific literature, ensures the availability of electronic databases, is responsible for updating the content of the RTA institutional repository, maintains the database of publications of the RTA academic staff.

- **Project Management and Technology Transfer Contact Point:** supports in the planning and implementation of training, scientific, infrastructure projects, commissioned research.
- **Financial Analyst:** plans the financial resources of SF and SP.
- **Information Communication Technology Research Center:** maintains the collection of scientific articles “Environment. Technology. Resources” e-environment and electronic open access databases rta.lv, rta.lv.
- **Institute of Engineering Sciences:** ensures synergy of pedagogical and scientific work, plans and implements scientific projects in the field of engineering sciences and related interdisciplinary fields, provides research and practical support for strengthening the scientific capacity of the SF, provides publication of the collection of scientific articles “Environment. Technology. Resources” in the e-environment. The SF and the corresponding SP management system can be conceptually assessed as a well-thought-out system focused on coordinated SF activities, based on the principles of democracy, which provides the necessary support in all basic issues of SF activities: record keeping, scientific activities, financial planning, lifelong learning, etc. Strengths of the management model: detailed division of responsibilities of the parties involved in the management process, stipulated in the regulations of structural units and job descriptions of officials, developed procedures in all fields of study and issues of the corresponding SP implementation process, a transparent system of decisions taken is available to all parties involved. As the SF management model covers a variety of activities aimed at the implementation and development of the study process, it involves many departments and individuals and poses a number of threats to effective management. The impact of the objectively possible human factor in management is realized here, which actually manifests itself as risks, when the management staff does not provide sufficient management of comprehensive processes in their sphere of supervision, coordinating their professional and academic activities, e.o. factors.

RTA's quality management policy envisages several directions to reduce management risks. These include staff consolidation, professional development measures, the opportunity to resolve work situations in a collegial manner, reviewing them in accordance with the RTA Code of Ethics.

For the transparency of the management process and availability of management decisions, in 2019 RTA has launched the implementation of an **electronic internal document management system** focused on management quality risk prevention, consistent documentation management and operational control.

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

Admission to study programs at RTA is governed by the admission rules approved by the Senate, which are based on the Cabinet of Ministers Regulations No. 846 “[Regulations Regarding the Requirements, Criteria and Procedures for Admission to Study Programs](#)”. Admission requirement to undergraduate programs is to have previously completed upper secondary education. Students are admitted to an open and equal competition based on the results of centralized exams. The RTA enrolment rules include three centralized exams with which candidates take part in the

competition: Latvian, mathematics and foreign language. In order to select the most successful and most motivated students, RTA has defined additional points for winners of 1st, 2nd and 3rd place in Latvian National Olympiad in Mathematics, Russian, German and French, as well as graduates of the Eastern Latvia Technology High School, for graduates of secondary professional education related to the field of product (fashion) design - 1.5 points; 1 point for a Junior Achievement Latvia certificate holder. Admission rules for each subsequent study year are approved by RTA in the Senate and published on the website by November 1 of the current year.

Table 1.5.1.

Competition coefficient and the number of students enrolled in the study program in the 1<sup>st</sup> year  
**“Fashion design and technology”, “Food processing”** 1st round

<b>Program</b>	<b>2014/ 2015</b>	<b>2015/ 2016</b>	<b>2016/ 2017</b>	<b>2017/ 2018</b>	<b>2018/ 2019</b>	<b>2019/ 2020</b>	<b>2020/ 2021</b>	<b>2021/ 2022</b>
Fashion design and technology	4,4	3,6	3,4	2,2	2,4	3,0	2,4	2,9
Food processing	-	-	2,0	2,5	2,0	2,0	3,0	2,0

In full-time studies there is a sustainable competition for state-funded study places (from 2.2 to 4.4 applicants per one state-funded study place).

The general statistics of the RTA show that the majority of study programs in the 1<sup>st</sup> level professional higher education programs (75-85%) are chosen by applicants with previously acquired higher education, 15-25% are graduates of general secondary education and vocational secondary education.

In SF study programs, a larger number of applicants (up to 40%) with previously obtained higher education is observed. This is indicative of the fact that study programs are essential for students' retraining opportunities, providing professional higher education relevant to the labour market.

The structure of students' age in study programs shows a typical tendency of the EU-27 - the first level professional higher education SP are chosen by applicants with professional experience / other previously acquired higher education. Only 15% of RTA SP students are matriculated in the year of previous secondary graduation, 27% belong to the age group 20-29 years, 42% 30-39 years, 12% - 40-49 years and 4% - 50+ years.

RTA has developed and implemented procedures **for the recognition of competences acquired outside formal education or acquired through professional experience and the learning outcomes achieved in previous education**, which is in line with Cabinet of **Ministers Regulations No. 505**. “Regulations regarding the validation of competences achieved outside of formal education or in professional experience and the learning outcomes achieved in previous learning” (“[Ārpus formālās izglītības apgūto vai profesionālajā pieredzē iegūto kompetenču un iepriekšējā izglītībā sasniegtu studiju rezultātu atzīšanas noteikumi](#)”)(Latvian only).

In accordance with the “[Regulations on the Recognition of Competences Acquired Outside of Formal Education or Professional Experience and Learning Outcomes Achieved in Previous Education at RTA](#)” (“Nolikumu par ārpus formālās izglītības apgūto vai profesionālajā pieredzē iegūto kompetenču un iepriekšējā izglītībā sasniegtu studiju rezultātu atzīšanu RTA”) approved by RTA Senate, such recognition is performed by the Board of Engineering, which reviews the applications and decides on the recognition or refusal of the acquired study outcomes. All decisions are recorded in the journal of recognition of study results achieved in previous education and professional experience, which is kept in the dean's office.

The RTA has also developed and consistently applies the procedure for recognizing previous education when transferring from another higher education institution to the RTA, transferring from one RTA study program to another, resuming studies after a break, after the first / second level professional higher education, when continuing studies after obtaining a bachelor's degree or second level professional higher education, after studies within the framework of interstate or inter-university agreements, in accordance with the Lisbon Convention. This process is regulated by the RTA “[Regulations on the Academic Recognition of Study Courses](#)”.

Insight: During the academic year 2018/2019 9 alignments were performed in the SF: 4- by transferring from other higher education institutions (RTU, DU, LU); 5 - recognizing study courses after graduation from other RTA SP. During the academic year 2019/2020 10 alignments were performed: 2 - by transferring from other RTA SP, 8 - by transferring from other higher education institutions (RTU, LLU, RTU, DU, BSA, RPIVA, Malnava College, Olaine TK). During the academic year 2020/2021 14 alignments were performed: 8 - by transferring from other RTA SP, 6 - by transferring from other higher education institutions (LLU, BA Turība, Jēkabpils AK, LU, BSA, DPU). During the academic year 2021/2021 7 alignments were performed: 5 - by transferring from other RTA SP, 2 - by transferring from other higher education institutions (LU, Jēkabpils AK). In total, during the reporting period, the Engineering Science Commission has evaluated and approved 48 applications of the study field for the recognition of study results achieved in previous SP. This amount confirms the fact that about 80% of students have previous higher education. Throughout the reporting period, there is a continuing interest in SP, including through the opportunity to recognize prior education.

#### **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.**

Procedure for assessment of student achievements in RTA is designed to ensure consistent application of the student-centered approach. The principles of RTA evaluation are defined by methodological recommendations “[Study quality system based on study results](#)” (“[Studiju rezultātos balstīta studiju kvalitātes sistēma](#)”(Latvian only)), regulations approved by the Senate “[Regulation for the procedure of examination and test session in RTA](#)”, (“Nolikumi par studiju kursu eksāmeniem un ieskaitēm”), “[Regulation for the state and final examinations in the RTA](#)” (Nolikums par valsts un gala pārbaudījumiem), approved by the RTA Study Council “[Methodological recommendations for organization of students' independent work in RTA](#)” (Metodiskie ieteikumi studentu patstāvīgā darba organizēšanai).

The **main principles of assessment of study results** at RTA are:

- **Relevance of the study outcomes assessment methods to the study program and the study outcomes defined in the study course.** The academic staff of RTA incorporates the requirements for the assessment of study results into the study course programs, which are evaluated and approved by the study council. The assessment focuses on the compliance of the assessment requirements and procedures with the achievement of the goals of the study program, the overall workload of students, as well as preventing any possible duplication of study content.
- **The clarity, consistency and public availability of requirements for the assessment of learning outcomes.** Academic staff of RTA incorporates requirements for assessment of study results into the study course program, which are placed on RTA e-course website [rta.lv](http://rta.lv) and is accessible to students upon commencement of study course. If the teaching staff delays with the placement of the study program on the e-course website, they receive a repeated invitation and a reminder that the requirements for the assessment of learning outcomes must not change during the course of implementation of studies.
- **Equalized application of learning outcomes assessment measures during the study course,** providing that the form of the examination consists of the results of formative assessment during the semester (at least 40% of the assessment) and assessment at the end of the study course (60%). Such a system allows to follow the progress of students' study succession, motivates students to purposeful study process during the semester, as well as facilitates the psychological and physical workload of examinations during the sessions.
- **Assessment of students' independent work,** which is a compulsory part of the study process, its content and evaluation are reflected in the content of study courses. The Council for the Study direction decides on the most suitable types of independent work for the study direction, agreeing on the amount of independent work, possibility of forming larger groups of students for independent work, and other issues.
- **The right of students to request explanations and to challenge the assessment in a specific manner** provided in the Regulations on examination and tests of study courses, on state and final examinations.
- As far as possible, **several evaluators** participate in the evaluation of learning outcomes. Such system in RTA works in defence of study research work and professional internship.
- Learning outcomes in the compulsory and limited elective part are graded in a 10-point scale (exam or differentiated test), while the assessment "passed"/ "failed" is allowed in the elective part.

The criteria for the assessment of SP study results are designed so that they correspond to the study results, are reasonable, verifiable and available to the student at the beginning of the SP and a separate study course. The evaluation criteria in the study courses, the form and procedure of the examination are determined by the lecturer, fixing it in the study course program, thus they are available to the students. The study course program is available to students in the [www.lais.lv](http://www.lais.lv) system, thus the assessment requirements are clear and accessible when students start learning the course. Self-reflection and mutual evaluation are important forms of assessment during studies. Problem-solving skills are developed in all study courses during practical classes, seminars, group work, etc.

RTA evaluates study results according to two indicators: qualitative (evaluation in 10 point system) and quantitative - study course points (CP / ECTS) according to the volume of the study course. Assessment of students' knowledge can be conditionally divided into two stages: formative and summative (summarizing). Formative assessment provides the lecturer and students with feedback on the necessary further organization of the study process, it encourages the student to supplement their knowledge, but allows the lecturer to evaluate the usefulness of the chosen methods. Summative assessment (test, differentiated test, exam) confirms the achievement of the

specified requirements (criteria), reveals how the study course has been acquired in general, and confirms the achievement of the set goal of the study course. Using various forms of summative assessment (tests, reports and projects, etc.), the lecturer checks how the student has mastered a specific topic or the content of the entire study course. Examinations are organized both orally and in writing, including theoretical questions, assignments and situation analysis.

Formative assessment methods are based on various forms of assessment, namely oral, written, practical and combined, providing reflection, collaborative activities, while summative assessment methods, which also include the above forms of assessment, provide for a variety of tests, adapting them to students' abilities, needs and interests (essays, tests, presentations of problem solutions, visualizations, practical results, mock - ups, etc.), as well as appropriate evaluation criteria.

The total assessment of the study course is formed as the total amount of individual works to be performed during the acquisition of the study course and the obtained assessments (tests, reports, projects, etc.). In order to ensure the students' ability to independently promote the development and specialization of their competencies, to carry out work, research or further study independently, the students' independent work, which makes up 60% (in full-time studies) of the SP volume, is practiced. Planning of independent work in each study course is performed at the beginning of the semester, coordinating it with the students and including the requirements in the study course program, which is available on the RTA e-course website.

The following assessment strategies are used in study courses using the PBL approach: Informal assessment consists of the lecturer's diagnostic and formative verbal assessments and the student's self-assessment. Diagnostic assessment helps to identify students' level of knowledge and skills at the beginning of the study course and in solving problems in a group. The purpose of formative assessment is to determine students' progress (both individual and group), to adjust the study process and to indicate further directions of problem analysis. Students' self-assessment is performed using individual and group reflection. The purpose of individual self-assessment is to assess personal study progress, adjust study tasks and create a folder of study achievements. Group reflection allows to evaluate the total study progress, to determine the contribution of each group member to the achieved result and to adjust the group study process. The overall assessment reflects the level of study achievement and is based on the system of assessment criteria discussed at the beginning of the study course. Criteria-based assessment is used to assess the test, the problem analysis process and the report, as well as the portfolio of personal learning achievements.

All information on the summative assessment of study results is available to students in the LAIS environment, where each student has access to their own study data. The results of the formative assessment are partly available on the RTA e-course website <https://ekursi.rta.lv/> (Latvian only).

#### **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.**

Principles of Academic Integrity and their application in RTA are governed by the Senate-approved regulations on "[Regulations on plagiarism control and prevention in RTA](#)" ("Plaģiātisma kontroles un novēršanas noteikumi RTA"), which is consistent with [Copyright Law](#), [Code of Ethics for Scientists](#), [Code of ethics of RTA](#) and [RTA Students regulations](#) (p.29). Plagiarism control and prevention

measures at RTA are applied to the study process and to the academic and scientific activities of the academic staff.

During the study process, measures to control and prevent plagiarism are taken during formative assessment by developing, submitting, and defending written and oral works that include elements of research work, including work with sources, statistics, and literature (study paper, term paper, essay, report, presentation, article, etc.), in the process of designing, evaluating and defending final study research papers, as well as in academic and scientific activities in publicly available study materials, scientific articles and monographs written by the academic staff.

To control plagiarism, RTA uses publicly available anti-plagiarism platforms, such as <https://www.plag.lv/> , [plagium.com](http://plagium.com), [plagiarismchecker.com](http://plagiarismchecker.com), [plagiarisma.net](http://plagiarisma.net), etc.

Since 2014 the final study research work at RTA is tested in the unified computerized plagiarism control system of the universities of Latvia. Each case of data coincidence is evaluated at the study direction council meeting, inviting the director of the respective study program and the supervisor of the final study research work. The study direction council may request oral or written explanations from the student whose work is suspected of plagiarism. If the findings are qualified as plagiarism, the Study council shall propose to the Dean the student's exmatriculation.

No cases of plagiarism have been identified in the direction of production and processing, and most of the final work may coincide with the requirements of the industry standards referred to in the work. The 28 final papers evaluated during the reporting period did not show any signs of plagiarism.

Since the academic year 2019/2020 RTA automatic plagiarism identification tool PlagScan is connected to RTA e-learning course website [ekursi.rta.lv](http://ekursi.rta.lv) and electronic journal website <http://journals.ru.lv/>, which also publishes articles written by the study direction teaching staff and students.

## 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.

In order to achieve the aims and results of the study programs, continuous improvement, development and effectiveness of the study program and corresponding study programs, RTA has established an internal study quality assessment and control system (Quality System), where the following areas are subject to internal evaluation:

- compliance of the study process with RTA development strategy (development policy);
- quality of the academic staff;
- quality of study programs;
- quality of cooperation with applicants and graduates;
- quality of the study process;
- quality of infrastructure;
- financing and quality of economic activity.

Self-evaluation reports of the SF until the 2017/2018 academic year are available on the RTA website. Since 2019, the data of the annual self-assessment of SF are stored in the internal document management system dvs.rta.lv. They contain an evaluation of both the SF and each study program corresponding to the study direction, as well as a summary of the most important SF development plans. Each area of the Quality System is documented in RTA but it does not exclude improvements. The RTA Quality System is designed to provide regular feedback on the quality of study implementation. This is achieved in several ways: Since 2020, RTA has been implementing a self-evaluation procedure of successive SF and SP, identifying and performing regular evaluation of the most important quality indicators of the education process in accordance with the evaluation calendar. The following aspects of SF quality are subject to annual self-assessment:

- Progress in implementing the accreditation / licensing recommendation plan;
- SWOT evaluation;
- Evaluation of the SF development plan;
- Analysis of annual admission results in study programs;
- Evaluation of the number of students and the student movement;
- Identified cases of plagiarism and anti-plagiarism measures;
- Analysis of survey results;
- Analysis of study literature;
- Evaluation of teaching staff;
- Mobility measures;
- Internship agreements;
- Professional standards;
- Study courses implemented with a problem-based approach;
- Student achievements, evaluation of material and technical base;
- Other information.

**Secondly**, annual surveys of students, graduates and employers, by performing their evaluation and making improvements initiated in the evaluation of the surveys. In addition, the RTA uses the opportunity to participate in international individual study quality indicator analysis platforms, for example, during the academic year 2021/2022 the RTA participates in the StudentPlus system for summarizing and analyzing students' study experience, distributing questionnaires and evaluating students' experience during their studies. The first collected data is expected in December 2021.

**Thirdly**, in May of each year, the RTA analyzes the risks of the study program implementation, which include such criteria as ◦) the number of students in the program, ◦) the qualification of the teaching staff and compliance with the study program implementation results and ◦) the adequacy of funding for the study program. The risk assessment is performed by a special commission headed by the Vice-Rector, in which the head of the study department, the financial analyst, the dean of the faculty, the head of the study field and the director of the study program participate. After the risk assessment, the commission agrees on the measures to be taken to attract students and funding, as well as to plan the academic staff.

**Fourth**, the RTA annually evaluates the results of the implementation of **study fields and study programs according to the criteria approved by the Study Council**. Criteria such as funding of the study field (incl. grant and attracted funding), filling of state-funded study places, planned number of graduates, level of technology application (acquisition, transfer, development), cooperation with employers (implementation of problem-based study courses, projects with employers, etc.), component of the academic staff (elected / non-elected; Dr.); foreign students,

level of study cycle. In the evaluation of study programs such aspects are considered as the structure of the program (modulated / unmodulated), the joint program (in Latvia / internationally); foreign students / Erasmus + students in the program / students from other higher education institutions; the program takes orders from employers (PBL, study research works), the number of students in the program.

Due to significant changes in the professional standard of a production logistics specialist, it was decided not to apply for accreditation the SP "Production Logistics". To ensure the continuity of SF studies, it is planned to develop and license a new bachelor level SP.

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

The documents of the [study quality management system](#)

The study program development and revision at RTA is regulated by [Regulation on academic and vocational studies and study programs at the Rezekne academy of Technologies](#) ("Nolikums par akadēmiskajām un profesionālajām studijām un studiju programmām"), approved by the Senate, which determine new study program planning schedule, parties and procedure. The main principles of study program design are:

- *relationship between study program development and key strategic and planning documents* [Operation and development strategy of RTA 2016-2023](#) ("Rēzeknes Tehnoloģiju akadēmijas darbības un attīstības stratēģija 2016.-2023.gadam") and Study program consolidation plan 2018-2023 (Annex in Latvian).

Regarding the SF "Production and processing", the Development Plan in 2018 stated that the SF corresponds to the RTA strategy, the SF has a stable demand of students, the SF meets labour market demand, the possibility to develop a new bachelor level study program with study modules "Design Technologies" and "Food Technologies" to provide students with the opportunity to continue their education to obtain the 5th professional qualification level in the fields of product design (textile and leather products) and food processing.

- *study program development is based on stakeholder collaboration.* For the development of study programs, a working group is established, which involves the teaching staff, general staff and students. Before considering a new study program in the Faculty Council, it must be evaluated by the Study Expert Council. Before the study program is approved by the Senate, it is independently evaluated by independent experts in the academic or professional sector
- *regular review of the content and implementation of the study programs, which is provided in accordance with the procedure for the preparation and approval of annual study plans and the study direction self-evaluation process.* Every year the content of the study program, the conformity of the study results of the study programs with the study results of the study program, and the compliance of the teaching staff with the implemented study programs are evaluated in the annual study plan approval process. After the approval of the study plans by

the faculty council, the teaching staff updates the study course programs and submits the updated versions for inclusion in the LAIS system, as well as post them on the RTA e-course website.

- *providing regular feedback* through surveys of students, graduates and employers. The results of the surveys are discussed at the study quality commission and study council meeting and taken into account, as far as possible, when reviewing the content of the study program or the implementation procedures. Students submit their proposals for improvement of the study process.
- *cyclical external evaluation of study programs* in accordance with the accreditation procedure established by the Republic of Latvia. An important aspect of external evaluation is the recommendations of the expert commission for the improvement of the study direction and study programs, which are included in the study direction plans and study program development plans, outlining the schedule, resources and responsible persons for their implementation.

The further implementation of the programs is planned by conducting a regular internal evaluation, which takes place in accordance with the annual self-evaluation procedure of the SF and the corresponding SP of the RTA, and a planned external evaluation, which takes place in accordance with the Regulation No. 793 "[Regulations for Opening and Accreditation of Study Fields](#)", made by the Cabinet of Ministers on 11/12/2018.

**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.**

All normative documents are available on RTA's internal server, which is accessible to all students in all RTA premises. The most important legal acts regulating students' rights are summarized in the publication "[My Academy](#)", electronic internal document management system. The procedures for the submission of student complaints and proposals are provided for in the RTA internal regulations (see Table.2.2.3.1).

Table 2.2.3.1.

Students' right to submit complaints and proposals provided for in RTA internal regulations

Complaint about exmatriculation	to rector	<a href="#">Student regulations (4.5)</a>
	possibility of appeal to the Senate	Student regulations (4.5)
Suggestions on the study process	in the Dean's Office	Student regulations 3.3.4.
To lodge an appeal against assessment of State Examination	to the Vice-Rector for studies and science	<a href="#">Regulations on state and final tests (27-33)</a>
To lodge an appeal against assessment of examination and test	to the Dean	<a href="#">Regulations on examination and tests of study courses (6.1. - 6.5.)</a>
To appeal the decisions of the RTA Academic Arbitration Court	In accordance with the procedures prescribed by the <a href="#">Administrative procedure law</a> .	<a href="#">RTA Constitution (Latvian only)</a>

The Students' Council has the right to:

- to request and receive information and explanations from authorized representatives of any RTA department on issues related to interests to students,
- to use veto rights in the Constitutional Assembly, the Senate and the Faculty Council on issues affecting students' interests,
- to participate in RTA decision-making bodies and participate as observers in tests and examinations in accordance with RTA legislation;
- to propose the adoption, amendment and repeal of laws and regulations of the Republic of Latvia and RTA affecting the interests of students.

[RTA Student Self-Government Regulations](#)

RTA QMS defines RTA policy for dealing with students' complaints. RTA QMS requires person in charge to record complaints, feedback, suggestions, incidents and risks, and to inform about it the staff and the process supervisor and to solve them within his/her competence and authority, that helps to manage and strengthen relationship with students, coordinate actions, solve problems and complaints, and get regular feedback. Student satisfaction is measured and results are used to make improvements.

The Whistleblowing Law came into effect in Latvia in 2019. Following this law, an [internal whistleblowing system](#) (Latvian only) has been created for RTA, which is available on the RTA website. A whistleblower (including the student) is entitled to blow the whistle especially on the following violations: failure to act and negligence of officials, or abuse of the official position by them, corruption, fraud, environmental safety threat, labour safety threat, infringement of human rights etc.

During the implementation of the study field "Production and Processing" there have been no cases when complaints have been made. There have been no written appeals against the assessments in the qualification papers. There have been no applications for assessment in a particular study course. There have been no complaints from students. There have been student proposals related to the inclusion of topics relevant to students' interests in the content of study courses, such as design methods, expanding their range, newer technologies, involving students in research grant projects.

In 2021, the RTA Students 'Self-Government created a trust e-mail, on which students can write their complaints, objections and proposals, which are resolved by the head of the academic self-government of the students' self-government in cooperation with the Vice-Rector for Studies and Sciences.

**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.**

RTA QMS identifies the information and knowledge needed for strategic and operational activities, ensuring that the information must be reliable and easily accessible to the eligible persons. The QMS system defines that RTA collects and manages the necessary data in its information systems, analyses, reports and publishes the data to respective user groups, employees and external users to ensure access to the required information, ensuring their security and protection of intellectual property. RTA regularly collects data related to the study process and scientific activities, submits it to external data managers in accordance with national procedures or uses it to improve the study process (see Table 2.2.4.1). RTA collects internal statistics to ensure more efficient program management, to evaluate the quality of study programs, to get feedback and to get suggestions from internal and external evaluators to improve the quality of the study program.

Table 2.2.4.1.

Areas of statistics composed by RTA

<b>Information to third parties:</b>	<b>Internal statistics: (every semester / study year):</b>
<ul style="list-style-type: none"> <li>● Central Statistical Bureau - study directions, study programs, number of students, enrolment results, distribution of students according to different criteria, academic staff, budget, etc.</li> <li>● MoES - studies in state-funded budget places, competition rates, tuition fees, graduates, etc.,</li> <li>● U-Multirank - On-demand information about program,</li> <li>● VIIA - Erasmus + Mobility Statistics.</li> </ul>	<ul style="list-style-type: none"> <li>• Recording of student attendance <a href="https://ekursi.rta.lv/">https://ekursi.rta.lv/</a></li> <li>· RTA has requested data from the State Employment Agency on RTA graduates registered as unemployed;</li> <li>· Qualification of the academic staff (graduate, elected staff);</li> <li>· Monitoring risk of plagiarism by faculty and study direction;</li> <li>• Student, graduate, and employee survey data.</li> </ul>

Information collected by RTA is used for improving the study direction. **Data on student attendance** are used for regular monitoring of the number of students. Starting from 1 September 2019, class attendance for all students is recorded on the website [vis.rta.lv](http://vis.rta.lv). As by the 2020,

student attendance statistics are conducted in the <https://ekursi.rta.lv/> environment. The study process specialist checks the attendance of lectures every month. If it is found that a student has not attended classes for more than a month, the education process specialist contacts the student and finds out the reasons for their absence. If the reason is justified, solutions are sought how the student can acquire the scope of missed classes and take overdue formative tests.

Every year, RTA requests data from the State Employment Agency on RTA graduates who have registered as **unemployed**. RTA also analyzes the graduate monitoring data compiled by the Ministry of Education and Science, which are available on the website of the Ministry of Education and Science: Studies in the thematic group of engineering sciences (<https://www.izm.gov.lv/lv/media/11031/download> (Latvian only)). According to the monitoring data of graduates of higher education institutions of the Ministry of Education and Science, in 2017 3 graduates graduated from the SF program, none of them are registered as unemployed, 3 employees by residence are registered in Latgale region. In 2018, 4 graduates graduated from the study program, none of them are registered as unemployed. According to the place of residence, 4 employed graduates are registered in Latgale region. In 2019, the SP was graduated by 2 students, none of them are registered as unemployed. According to the place of residence, 2 employed graduates are registered in Latgale region. According to the data of the State Employment Agency, out of 8 graduates in 2000, no unemployed graduates are registered, 7 are registered in the Latgale region by place of residence. In 2021, 7 graduates were not registered as unemployed, all are registered in Latgale region by place of residence.

See the analysis and evaluation of the results of the graduate surveys in Annex 8.

Monitoring data of graduates of the Ministry of Education and Science show that employment in% (recalculated to the known ones) at the college level for RTA graduates is 82.9%, which exceeds the indicative 80% employment threshold. Employment in the highest qualification (1 managers; 2 senior specialists; 3 specialists; 0 NAF professions) basic groups of professions (according to the LR Classification of Professions) also accounts for 69% of RTA college level graduates, which significantly exceeds the indicative threshold of 47.1%.<sup>[1]</sup>

[1] Brief description of college and bachelor level graduates. The Ministry of Education and science.

<https://www.izm.gov.lv/lv/media/2116/download>

**Statistical indicators of the academic staff** are also important for the quality of the education process. The most important ones are the proportion of elected and unelected academic staff in the study program and the proportion of graduate academic staff at RTA in general and in the study direction (see Sub-section 2.3.). Statistics on RTA academic staff are generally maintained by the RTA Personnel Department. Statistical data on the study directions of the academic staff and the corresponding SP are analyzed by the study field self-evaluation working group.

Mechanisms have been developed to provide feedback to students, graduates and employers. In order to provide feedback, surveys of students, graduates and employers are organized in accordance with the procedures specified in the annual self-assessment procedure of the RTA SF and the corresponding SP approved by the Study Council. Information acquisition mechanisms:

- from students: questionnaires to be filled in anonymously at the end of each semester; individual talks with the director of the study program;
- from graduates: first, electronic questionnaires are sent out centrally, which are compiled by the Study Department and evaluated by the SF Council; secondly, telephone surveys of the program director are carried out; the former students are called 1 year after graduating from the RTA to find out where they work or study, how the study program is evaluated in general, the study courses that are most useful in the study program (which is further necessary at

work), which should be additionally included in the study program. what are the main disadvantages?

- from employers: in every meeting with them in the company, at the RTA premises, seminars, public events, informal events, current events in the industry, vacancies, opportunities for developing internship and diploma papers in the company, shortcomings in the training of specialists, etc. are discussed. preparation and weaknesses in the SP.

See Annex 8 for analysis and evaluation of the results of surveys of students, graduates and employers, their use in the improvement of the content and quality of studies, with examples of each of the programs included in the field of study.

RTA monitors that respondents receive aggregated feedback on the results of the surveys. RTA Study Department prepares informative announcements about centralized surveys, which are placed on RTA website or sent to respondents.

**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).**

Information about the SF and the corresponding SP is available on the RTA website and in the LAIS system (see Table 2.2.5.1.).

Table 2.2.5.1.

Information about the SF and SF SP

Information	Website	Type of access	Responsible person
Study programs implemented by RTA	RTA website <a href="https://www.rta.lv/pamatstudijas">https://www.rta.lv/pamatstudijas</a> <a href="https://2021.rta.lv/sv_razosana_un_parstrade">https://2021.rta.lv/sv_razosana_un_parstrade</a> (Latvian only)	free access	RTA Study Department study process specialist
Self-assessment reports of RTA study fields (until 2018)	RTA website - <a href="https://2021.rta.lv/pnzs/?action=view_pzs&amp;record_id=5&amp;way=13">https://2021.rta.lv/pnzs/?action=view_pzs&amp;record_id=5&amp;way=13</a> (Latvian only)	free access	RTA Study Department study process specialist
RTA study program register, study plans	LAIS - <a href="http://www.lais.lv">www.lais.lv</a>	authorized users	The main specialist of the study process of the RTA Study Department

## 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.**

To successfully ensure the study process, RTA uses both state budget grants and private funds. Since the establishment of the higher education institution in 1993, the financial position has been assessed as stable. Revenue consists of: a grant from general revenue, tuition fees in higher education, funding from EU structural funds, participation fees in seminars, conferences, courses, student accommodation service fees, other operating income.

Expenditures are planned in proportion to the revenue in the budget. The main items of expenditure are:

staff remuneration, premises maintenance expenses and utility payments, material expenses of the study process, purchase of new equipment, reconstruction and repair of premises.

The financial provision for the study programs of RTA SF “Production and processing” in 2021 was 88 thousand EUR, which includes state budget financing. (see Table 2.3.1.1.).

Table 2.3.1.1.

Financial resources for the implementation of study programs corresponding to the study field  
(EUR)

<b>Funding</b>	<b>2017, EUR</b>	<b>2018, EUR</b>	<b>2019, EUR</b>	<b>2020, EUR</b>	<b>2021, EUR</b>
State budget funding for the study field (without scholarship funding)	44 235	44 630	46 481	46 685	88 026

Funding of science base and funding of research performance are not divided by study directions, but is allocated to RTA for the provision of scientific activities (remuneration of research staff, business trip expenses, grant funding, database subscriptions, capital expenditures) and scientific institutes, while the academic staff involved in science represent different study directions. In 2020, RTA research revenues amounted to almost EUR 717 thousand EUR (see Table 2.3.1.2.).

Table 2.3.1.2.

RTA funding for provision of academic staff research (creative) activities (**EUR**)

<b>Funding</b>	<b>2016, EUR</b>	<b>2017, EUR</b>	<b>2018, EUR</b>	<b>2019, EUR</b>	<b>2020, EUR</b>
Funding of science base	152 622	194 774	209 367	190 347	191 094
Funding of national research programs	56 619	77 401	87 065	91 916	326 952
Performance funding	87 738	39 843	138 087	104 009	80 480
Other State budget revenue	36 531	10 000			
EU Structural Funds	345 945	786 571	1143 562	347 690	90 712
Revenue from contract work with legal entities of the Republic of Latvia	53 011	14 841	21 536	12 182	28 488
<b>Total funding</b>	<b>732 466</b>	<b>1 123 430</b>	<b>1 599 617</b>	<b>746 144</b>	<b>717 726</b>

Funding for RTA library collections is not divided by study directions, because often the library resources in the process of studies are used by students of several study directions (see Table 2.3.1.3.). The most important literature in each course is updated in cycles, but the most relevant additional literature items are updated on a regular basis.

Table 2.3.1.3.

Funding for the acquisition of the RTA library collections (EUR)

<b>Expenditure library collections</b>	<b>2016, EUR</b>	<b>2017, EUR</b>	<b>2018, EUR</b>	<b>2019, EUR</b>	<b>2020, EUR</b>
Periodicals	3 814	2 940	3 009	3 333	3369

Books	11402	12102	8 206	7 419	12407
Electronic documents and databases	16166	19184	15828	7 086	2930
Total funding	31382	34226	27043	17 838	18706

Funding for student council is provided in the amount of at least one of two hundredth of the state funding for the study process and tuition fees each year, and fluctuates around twelve thousand euros per year (see Table 2.3.1.4).

Table 2.3.1.4.

Funding for RTA Student Council (EUR)

Funding	2016, EUR	2017, EUR	2018, EUR	2019, EUR	2020, EUR
Funding for student council, EUR	11 668	12 422	12729	12331	12918
State budget funding for the study process, EUR	1 926 867	2 001 323	2076881	2162918	2242195
Tuition fee income, EUR	406790	482993	468 832	303 241	341 409
Total income from the study process, EUR	2 333 657	2 484 316	2 545713	2 466159	2583604
Student council funding ratio, %	0,5	0,5	0,5	0,5	0,5

SP funding sources consist of state budget funding and student tuition fees. The tuition fee is

approved by the decision of the RTA Senate for each subsequent academic year. The costs of the study place in the SP “Food Processing”, “Fashion Design and Technology” are determined taking into account the basic costs of the study place, at the SP level, duration, form, as well as the structure and field of study of the academic staff, i.e. 1 630.11 (basic payment for the study place) \* 1.8 (minimum study cost coefficient) \* 1 (study level coefficient) = 2 934.20 EUR.

In total, the annual study costs of one full-time student in the Republic of Latvia or the EU are estimated at EUR 2934.20, which does not exceed the costs of European countries for the preparation of one student in a similar specialty.

RTA estimates that the direct costs amount to EUR 2200.65 per conditional student per year, indirect costs (expenses for the operation of the RTA, including the RTA library, land tax, rent of premises, rent, building maintenance costs, telephone subscriptions and service costs), utilities, current repairs, special programs, etc.) per 1 conditional student per year is 733.55 EUR, forecasting the number of students in a group of 10 and more.

The use of financial resources is in accordance with the distribution approved by the Senate. See the available funding of the SP in Tables 2.3.1.5, 2.3.1.6.

Table 2.3.1.5.

Study program “ **Food processing**” funding

<b>Financial year</b>	<b>2020</b>	<b>2021</b>
Thematic area of the study program: Production and processing		
Minimum study cost coefficient:	1,8	1,8
Study level coefficient:	1	1
Study base costs (EUR)	1518,98/1538,98	1630,11
Scholarship amount (EUR)	150,82	200,00
Sports, culture, student hostel (EUR)	13,52	13,52
Number of study places financed from the state budget	7	10
Financing for the number of study places financed from the state budget	20 373	62 954
Tuition fee income to ensure the implementation of the study program	0	0

Table 2.3.1.6.

Study program “ **Fashion design and technology**” funding

<b>Financial year</b>	<b>2020</b>	<b>2021</b>
Thematic area of the study program: Production and processing		
Minimum study cost coefficient:	1,8	1,8
Study level coefficient:	1	1
Study base costs (EUR)	1518,98/1538,98	1630,11
Scholarship amount (EUR)	150,82	200,00
Sports, culture, student hostel (EUR)	13,52	13,52
Number of study places financed from the state budget	10	10
Financing for the number of study places financed from the state budget	29 105	31 477
Tuition fee income to ensure the implementation of the study program	0	0

**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.**

RTA owns a 4,2 hectare lot at 115 Atbrivosanas aleja, where a campus is being built, bringing together educational and scientific resources in a single location, thus ensuring a much higher quality, attractive and, above all, rational and economically efficient infrastructure. The study process at RTA is implemented in four study blocks. The total area of the central building at 115 Atbrivosanas aleja is 4844.5 m<sup>2</sup>. For the study process there are used 19 classrooms with a total area of 2059.4 m<sup>2</sup>.

The Information Technology Centre with two classrooms and two spacious computer classes is used for the study process. The building of the Faculty of Engineering houses a large and modern library and a reading room, which are accessible to students. There are two computer rooms with an area of 104.9 m<sup>2</sup> and 97.9 m<sup>2</sup> with 25 and 21 computers. Students and academic staff have access to all necessary resources for the study process. All buildings are accessible to people with special needs, equipped with an entrance and indoor lifts.

The material and technical facilities are constantly updated and improved. The lecture rooms are equipped with new and comfortable furniture, the air conditioners are installed, all the lecture rooms (100%) are provided with the necessary equipment, i.e. boards, screens, blinds, overhead

projectors etc. All computers are connected through a computer network. Lecturers and students can use the *open-access Internet and Wi-Fi network*. Video and audio equipment as well as instructional films are used to learn foreign languages. RTA has acquired equipment for translation of small conferences and international seminars.

For the implementation of the SF, a co-production space is used in the RTA applied research center "SalesLab". RTA students have access to a student hostel at 22 Maskavas Street, but it is planned that in 2022 a student hostel will be opened in the territory of the RTA student campus, located at Atbrīvošanas al.115, which is currently being renovated. For the students' sporting and interest needs, the RTA provides premises for sports activities, dance group, choir activities, acquisition of professional and interest education programs.

Material and technical support of the Faculty of Engineering (IF). See Annex 20 for information on laboratory equipment, hardware, presentation equipment, and software available for the SF. The IF infrastructure consists of: 1) a new faculty building (put into operation in 2014) with laboratories, workshops, auditoriums, staff and student premises; 2) Information Technology Center (computer rooms, electronic publications room, computer equipment service room, server room); 3) Laser Technology Center (put into operation in 2019). In addition, the main building of the RTA is used to acquire social, humanitarian and design study courses.

The material and technical base of the RTA IF fully ensures the successful implementation of all SPs. Equipment for all laboratories / workshops is freely available to all IF students, lecturers and researchers on weekdays from 7:30 to 19:30, on weekends from 7:30 to 17:30. 6 engineers and 2 laboratory assistants are involved in the work with specific laboratory and workshop equipment, who provide support to lecturers in the course of classes, students in the development of research work, course projects and qualification papers, scientists in the development, production and approbation of experimental stands and prototypes. 3 IT specialists ensure the normal functioning of IF computer equipment (computers, interactive whiteboards, projectors) and the Internet. The available software can be used freely by any IF student, lecturer or researcher (see in Annex 20 for information on available software).

All auditoriums are equipped with interactive whiteboards (8 pcs.) or multimedia projectors (10 pcs.). The total number of computers in the faculty (excluding the library) that students can use during the study process is approximately 100; most of these computers are connected to the Internet. Taking into account that the total number of students at the Faculty of Engineering (including part-time students) is about 600, it can be concluded that the number of existing laboratory and auditorium premises, area, number of workplaces, computers and presentation equipment in the faculty fully meet the needs of the study process. Wi-Fi is freely available throughout. All rooms are accessible for people with disabilities. For information on the provision of the RTA Faculty of Engineering with auditoriums, see in Annex 20.

The RTA has purposefully modernized the material and technical base in engineering programs, including attracting project funding for sub-activity 3.1.2.1.1 "Modernization of premises and equipment of higher education institutions to improve the quality of study programs, including providing opportunities for persons with disabilities" "Construction of a new Faculty of Engineering of the Rēzekne Academy of technologies and purchase of equipment", project implementation time 15/04/2010 - 31/10/2015 (project number 010/0117 / 3DP / 3.1.2.1.1 / 09 / IPIA / VIAA / 028).

As a result of the project, laboratory equipment was purchased for EUR 4 million, and EUR 5.8 million was invested in the construction of a new building for the Faculty of Engineering. The following laboratories have been established and equipped:

1. Laboratory equipment for physical processes;

2. Electronics, electrotechnics and electric drive laboratory equipment;
3. Computer network and telecommunications training class;
4. Laboratory equipment for mechanical research of materials;
5. Flow mechanics, pneumatics and hydraulics training class;
6. Mechatronics training class;
7. Ecology and environmental protection training class;
8. Chemical process laboratory equipment;
9. Microbiology and biotechnology laboratory equipment;
10. Ecotechnology laboratory equipment;
11. CAD / CAE / CAM training class;
12. Mechanical workshop equipment;
13. Sample preparation equipment;
14. Gas cylinder and compressor room equipment;
15. Laboratory equipment for ensuring environmental health and human living conditions;
16. Student creative workshop equipment.

In the summer of 2014, a modern building of the Faculty of Engineering corresponding to the level of European education and science was opened, with modern equipment for the study and research process.

For the needs of the SP “Fashion Design and Technology” a well-equipped fashion design workshop with the necessary equipment for designing and manufacturing / sewing products is available at the RTA IF Geotechnology and Eco-Industry Research Center, co-production premises at RTA Applied Research Center “SalesLab” (for a list of equipment / facilities see Annex 20).

During the development of the IF laboratory base, laboratories were equipped with the most versatile equipment that can be used by students from different SPs. The material and technical provision of the RTA IF is sufficient for the implementation of the SP “Fashion Design and Technology”, “Food Processing”, for research and practical work in laboratory conditions for both students and academic staff. A virtual tour of the RTA premises can be viewed on [https://2021.rta.lv/inzenieru\\_fakultate\\_360](https://2021.rta.lv/inzenieru_fakultate_360)

**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.**

The RTA Library is located at 115 Atbrivosanas aleja in the k-4 block. In 2016, the RTA Library was re-accredited as a local library.

The structure of the library consists of a reading room, a subscription to study and branch

literature, a collection and cataloguing sector, a bibliography and information sector.

The library is open to students and provides access to information resources. Library opening hours at the beginning of each academic year are reviewed basing on faculty demand and actual user attendance statistics by day and hour. Twice a month the library is open to users on Saturdays.

The library is accessible to people with reduced mobility. See Table 2.3.3.1 for a description of the library facilities.

Table 2.3.3.1.

Library premises, suitability for continuous study and research work

<b>Library premises</b>	<b>Indicators/ evaluation</b>
Total area of premises (m <sup>2</sup> ) <i>When working in the reading room, one can use the reading room computers or come with their own computer and connect to the Wi-fi network.</i>	459
A reading room (m <sup>2</sup> )	418.8
Number of reader work places in the library	39
Technical condition of the premises (good, satisfactory, repairs needed, emergency)	good
The last time a reconstruction, overhaul or routine remodelling has been done	The building was built in 2014

The library has two individual rooms where students can work seamlessly. The reading room is equipped with a pouf lounge area. RTA library provides all traditional services, including e-environment. The electronic catalogue reflects information about all books and magazines in the library's collection.

In order to provide qualitative support to RTA educational and scientific process, special attention is paid to users' awareness, providing more opportunities for searching e-resources and information retrieval, educating and consulting users on information literacy. Library staff is constantly providing assistance and information to its users. In 2020 1181 inquiries were provided during the study year.

The library collection corresponds to RTA study programs and directions. The most recent literature in the relevant field is regularly purchased, and most of the funding is used for English books in the field (for an overview of the literature available at RTA, see Table 2.3.3.2). In accordance with the "Regulations for the Provision of Literature", book requests are regularly submitted to the library. For a more convenient and faster execution of the submission process, a Form for replenishing library funds was created, which is available electronically in the RTA document management

system. Books purchased or published in projects provide a significant addition to the collection. Subscription to the Databases are decided upon at the session of the Science Council after having familiarized itself with the Database subscription price and statistics on the use of previous periods. Interlibrary loan services are available to library users.

Table 2.3.3.2.

Provision of books in the study field "Production and processing" on 17.06.2021.

RTA library fund

<b>Branch</b>	<b>Number of titles (Total)</b>	<b>Number of copies (Latvian Language)</b>	<b>Number of copies (in a foreign language / English)</b>
658 Business economics	268	803	183/119
001.8 Research	30	61	15/15
303.1 Social science methods	11	32	8/5
620.2 Materials education	14	96	14/1
502 Environmental protection	397	1097	420/207
504 Environmental chemistry and pollution	47	175	62/11
577 Biochemistry. Molecular biology	13	10	18/13
349.2 Labour law	42	181	10/5
355.58 Civil protection	10	22	12/0
614.8 Human security. Accidents	34	68	23/1
658.5 Organization of production processes	79	240	69/26
51 Mathematics	491	2775	315/80
004 Information and communication technologies	512	1432	772/376
613.2 Nutrition	41	116	4/0
641 Food products. Cooking	187	458	57/35

637.1 Dairy industry	42	11	3/1
637.5 Meat products for human consumption	5	0	5/0
664 Food industry	42	123	26/6
658.6 Non-food commodity science	13	35	8/2
7 Art	1400	1553	683/265
7.03 Art history	139	290	66/30
741 Drawing and sketching	22	19	16/7
745 Arts and crafts. Design	54	61	27/11
746 Handicrafts	61	89	23/16
75 Painting	205	163	113/17
646 Clothing and personal hygiene	53	61	41/22
687 Sewing industry	157	39	129/90
391 Folk clothing. National costumes. Fashion	59	51	26/11

Of the total number of items available in the library (11930), which correspond to the specific nature of the study direction, 30% are in a foreign language. In the last five years, the library has purchased 1502 new books in SF and related fields.

In academic year 2020/2021 the library offers for its users the databases as follow: iFinances, iTiesības, iBusiness, BilancePLZ Latvijas Standartu bibliotēka, EBSCO, ScienceDirect, Scopus, Web of Science, LNB Digitālās kolekcijas. Database trials: 2019/ 2020 - 13; 2020/2021 - 4 are also offered. Some databases can also be used remotely. In 2020, the use of databases was 31,592 sessions. In order for students to gain knowledge about the RTA library e-resources, their use and availability, the library offers classes and individual consultations. Using the resources of the library, it is possible to obtain an overview of the literature necessary for the implementation of the study process by using the electronic catalogue of the RTA library.

The list of sources necessary for the study process as well as the materials prepared by the lecturers for the study process can be obtained in the e-course (Moodle) system which provides access throughout the study process.

For the convenience of users, a section on e-resources has been created on the library's website, where various hyperlinks to access databases, RTA and other academic articles, and free access resources are compiled. In accordance with the conditions of the quality management system, the resources ensuring the study process are regularly monitored. There has been created and developed such a work environment where students can learn qualitatively, independently generate ideas, develop a creative attitude, be active and motivated. Students have access to a

learning environment that has been developed and enhanced in accordance with the principles of functionality, modernity, aesthetics, human safety and ergonomics. RTA is purposefully working to ensure the widest possible availability of information about the study process and study content that is freely accessible to all students. The most important information resources available to students at RTA include:

1. Electronic Information System of Latvian Higher Education Institutions (LAIS) providing the following information available to students: course descriptions, study plans, timetables, changes in them, student performance, information on orders related to the study process (matriculation, exmatriculation, scholarships, etc.). There is also a unified anti-plagiarism control system in LAIS, where students' final papers are tested.
2. Moodle electronic study site [rta.lv](http://rta.lv), where students have access to study course programs, requirements for assessment of study results, recommended literature lists, study course study materials. The system is being improved every year with the addition of new study courses. Since 2016 RTA has prioritized the preparation of study courses in the official EU foreign language and the preparation of distance learning course materials on the e-course website.
3. Scientific journal and article collection site <http://journals.ru.lv/>, where all RTA conference proceedings and journals are available, including proceedings of the scientific conference "Environment. Technology. Resources", issued by RTA since 1996.
4. Annual RTA International student and teacher conference collection of articles "Human. Environment. Technology".
5. Latvian Library Information System ALISE <https://biblio.rta.lv/Alise/en/home.aspx>, which provides remote access to library catalogues and diverse ways of information search, as well as ordering / booking editions for authorized users.

The website of the RTA Library provides links to [the Common Catalogue of Higher Education Institutions and Special Libraries](#), the [Common Catalogue of Rezekne Region](#), and the [National Catalogue](#), which provide the search and request of the necessary resources through interlibrary loan.

The library is open on weekdays from 9am to 5pm/ 6pm. Each year, at the suggestion of master/part-time students or the head of the study direction, the library also provides readership on Saturdays, but these schedules are not regular- they are tailored to current demand and return to normal working hours when actual demand runs out. In case of Covid-19 emergency, RTA library provides remote customer service and use of e-resources.

**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.**

RTA uses the *Moodle* system in the study process. RTA Regulations on lecturers stipulate that for each study course the lecturer develops a description of the study course in accordance with the regulations approved by the RTA Study Council "Regulations on development of study courses / modules at RTA", develops study course materials, which cover the theoretical material of the study course, the tasks of students' self-examination, the tasks of independent work, the criteria / materials for the evaluation of study results. The lecturer places the study course materials on the

study course website [ekursi.rta.lv](http://ekursi.rta.lv), following the “Methodological recommendations for creating and maintaining the study course content on the website [ekursi.rta.lv](http://ekursi.rta.lv)” approved by the RTA Study Council, where a study course template is developed, including questionnaires that the lecturer can use in order to get feedback, and this sample make it easier for lecturers to create a study course in *Moodle*. According to the order of the Rector of the RTA, student attendance is also recorded in the *Moodle* environment. In the conditions of distance learning (lectures, practical classes, including laboratory works, if they can be implemented remotely, consultations, discussion clubs, forums, etc.), and in order to provide virtual mobility, RTA uses the communication tool Microsoft Teams or Google Meet (if Microsoft Teams is not available). RTA has developed methodological recommendations for lecturers and students to work in the *Microsoft Teams* environment. Upon need or individual request, the RTA provides courses, individual consultations or technical assistance for work in the *Moodle* or *Microsoft Teams* environment.

In order to find out the needs of the lecturers, operating on the communication platforms specified by the RTA, the RTA organizes surveys, where the lecturers are invited to make proposals for the necessary support measures. 20 lecturers responded to the survey conducted in September 2021. 12 answered that no additional training and consultations were required, appreciating the prepared methodological materials and instructions, 8 lecturers were provided with individual consultations or technical support for work in the *Microsoft Teams* environment. No request for a seminar or one-to-one consultation was made for *Moodle* activities.

### **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.**

RTA academic staff planning issues are regulated in [Operation and development strategy of RTA 2016-2023](#) (“RTA darbības un attīstības stratēģijā 2016.-2023.”), [Academic Staff Development Guidelines 2018-2023](#), (“RTA akadēmiskā personāla attīstības pasākumu plāns 2018.-2023.”). Other issues related to the planning of academic staff at RTA are regulated by the [Regulations for lecturers](#), [Regulations on planning, registration, control and payment of RTA lecturers’ methodological developments and scientific research](#) (Latvian only), [Procedure of planning and accounting of workload of RTA academic staff](#), [Procedure for assessing the quality of work of RTA academic staff](#) (“Nolikums par RTA docētāju”, “Mācību metodisko izstrādņu un zinātnisko pētījumu plānošanas, uzskaites, kontroles un apmaksas noteikumi”, “RTA akadēmiskā personāla studiju darba apjoma plānošanas un uzskaites kārtība”, “RTA akadēmiskā personāla darba kvalitātes vērtēšanas kārtība”) and other documents. The most important criteria for the selection of the academic staff are scientific and professional competence. RTA assistants, lecturers and assistant professors are elected for six years in accordance with the requirements of the Law on Higher Education Institutions. Professors and Associate Professors for the first time shall be elected for a term of six years, providing the conversion of a fixed-term contract into a contract of indefinite duration after the assessment of eligibility within the time limit set by RTA. All vacancies for academic staff are advertised in open competition, published in the newspaper “Latvijas Vestnesis”, and other information sources. Applicants' eligibility for the advertised vacancy is assessed in accordance with the [Regulations on Academic Positions in RTA](#). (“Nolikums par akadēmiskajiem amatiem RTA”).

To attract foreign teaching staff, RTA publishes advertisements on the [Euraxes](#) portal.

Guest lecturers are involved in the implementation of SF vocational training courses to read individual courses or topics.

In order to improve the qualification of the staff, the courses organized by the Lifelong Learning Center of the RTA and the trainings organized by the institutions representing the textile industry and food processing industry and merchants are regularly attended. A significant increase in qualification is doctoral studies. In 2017, I. Silicka successfully completed her theoretical studies, passed the doctoral examinations of the RTA Doctoral Study Program "Pedagogy" and became a candidate for a scientific degree. In doctoral studies, in its turn, since 2020 S.Mežinska and M.Kijaško have renewed their doctoral studies for the development of their doctoral thesis. In 2020 S.Gaile graduated from the Master's program in Food Science at the Latvian University of Agriculture, Z.Pīgožne, N.Brokāne, I.Unzule graduated from the RTA Master's program (design). In addition, SF purposefully plans the development of the academic staff, including promoting the further doctoral studies of the strongest graduates of master's degree programs.

Since December 1, 2018, two SAM 8.2.2. projects that envisage both the involvement of foreign lecturers within the project and the professional development of the academic staff have been implemented.

**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.**

RTA quality management policy sets out the RTA quality principles, including:

- *Staff engagement and development* - employees share a similar value system, mutual trust and a sense of responsibility. RTA invests resources in the professional development of its employees and encourages them to become more involved in the development of the institution. RTA evaluates the professional competence of employees and their compliance with the quality of their duties, supports and motivates the improvement of professional qualification, career development, provides social guarantees. RTA promotes the consolidation of employees and the development of a unified corporate culture.
- *Continuous learning and improvement* - introduction and use of new, innovative technologies, knowledge sharing, introduction of innovations and improvements. Employees are introduced and trained to work with new and innovative technologies, to use them in their work and increase the competitiveness of RTA.

RTA Academic Staff Development Guidelines define the main HR development processes in RTA activities:

- *Student-centred study process*,
- *A research process* focused on public demand for innovative products and services,
- *Communication process*, which provides for the exchange of knowledge and innovation in the inter-university level, effective international academic and research co-operation,

- *Technological process* focused on access to high quality science-based higher education, introduction of new modern technologies in the study and research process (including distance learning).

In the system of attraction and motivation of the teaching staff, RTA emphasizes the principles of strategic planning of the teaching staff, principles of determining the workload, principles of payment for the amount and quality of work, measures of motivating the growth of the teaching staff.

The academic staff of the SF “Production and Processing” is selected in order to be able to consistently implement the goals of the SP and achieve the set study results. The SF has both elected lecturers and guest lecturers. The employment policy of guest lecturers at the RTA coincides with the strategic principles of the RTA academic staff development - professionals with extensive professional work experience are invited to teach professional SP profile subjects:

- asoc.prof. L.Litavniece teaches study courses Production Organization and Planning, Basics of Production Economics, supervises the development of the economic part of the qualification work for students; has 7 years of experience working in the banking sector; for 5 years - RTA project department manager; owner and manager of the company SIA Safira L (food processing), member of the Council of Rēzekne Business Association, member of the Latgale Council of the Latvian Chamber of Commerce and Industry, member of the Knowledge Economy Council of the Latvian Chamber of Commerce and Industry;
- lecturer M.Kijaško leads IT study course, has professional work experience in IT field 20 years;
- prof. A.Stode, professional assist. prof. .D.Apele, lecturer S.Mežinska teaches professional study courses in the field, they are members of the Latvian Designers' Union;
- guest lecturer V.Bulindža, S.Kravčenko, I.Dzindzuka and other lecturers teach professional study courses in the field, has many years of experience in the field of production and processing.

Attracting professionals from industry stimulates students' interest in studies and significantly improves the quality of studies. For full information about the lecturers' professional work experience and experience in the field, see Annex 9 and their CV in Annex 10.

The qualification of the teaching staff at RTA is evaluated and raised in several ways:

1. Academic staff elected once at RTA must complete a 160-hour professional development program in “Higher education didactics” or “Innovation in higher education”. The program offers, among other things, courses on personal development, scientific writing, and other topical issues of higher education: student-centred approach, quality management, etc.
2. All lecturers have the opportunity to apply for the evaluation of the quality of work of the academic staff, which provides the determination of the quality factor applicable to the salary of the next year. Starting from 2018, the quality indicators of lecturers' work are aligned with the student-centred approach, assessing the contribution of the lecturer to the development of the academic, scientific and professional competence of the student. In the academic year 2019/2020 eight lecturers involved in the study direction got score between 8 and 50, which represents a corresponding percentage increase in salary for the following year.
3. Lecturers employed by the SF have the opportunity to participate in RTA project No. 8.2.2.0/18/A/0168 “Strengthening of RTA academic staff in the study direction “Mechanics and metalworking, heat engineering, power industry and mechanical engineering” and “Management, administration and real estate management” lecturers involved in the study direction improve their English language skills, acquire digital skills and leadership

competencies. This opportunity is used by 12 of the teaching staff employed by the SF, who also teach at the SF “Mechanics and metal working, heat power industry, heat engineering and mechanical engineering” and “Management, Administration and Real Estate Management”. In the project „Strengthening of the academic staff of Rēzekne Academy of Technology SF,, Education, pedagogy and sports” No. 8.2.2.0/18/I/002 involved lecturers who develop digital and professional English skills, leadership and collaboration competencies, learn the content of the English course using various digital tools, online platforms, etc., used in teaching forms that promote the development of leadership and cooperation skills (problem situations, initiative, planning of joint actions, etc.), which is further used in the teaching of study courses.

4. Lecturers of the study field regularly increase their qualification by attending exhibitions of branches and related branches in Riga, Vilnius, Berlin, Milan, London, etc. In some cases, visits are also coordinated with visits to foreign partner higher education institutions, as a result of which lecturers have the opportunity to meet in person with colleagues of a particular foreign higher education institutions, to get acquainted with their research, organization of the study process and laboratory base. The acquired knowledge and established contacts are further used to improve the study and research process.

**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.**

38 lecturers are involved in the implementation of the corresponding Study Programs of the Study Field (see Table 2.3.7.1.).

Table 2.3.7.1.

**SF “Production and processing” Teaching staff**

Status	Dr.	Mg.	Professionals	Prof.	Asoc. Prof.	Assist. Prof.	Lect.	Leading researchers	Researchers	Scientific. assist.
Elected to the RTA	10	10		1	5	4	10	9	7	1
Visiting staff		17	7			1	16			

20 (53%) are elected to the RTA, 18 (47%) are visiting staff. 17 (45%) lecturers are simultaneously elected to academic and scientific positions. 10 or 26% of all teaching staff have a doctoral degree, 27 (71%) have a master's degree, 7 guest lecturers have higher education - specialists in the field of professional activity with a joint work experience of 1 to 30 years in the field. The elected lecturers hold the positions of a professor (1), an associate professor (4), an assistant professor (5) and a lecturer (26). Visiting lecturers hold the positions of an assistant professor (1) and guest lecturers (16). 24 of the lecturers employed by SP teach only or mainly the SP “Fashion Design and

Technology” or “Food Processing”, 14 - also teach study courses at other SP of the Faculty of Engineering or other faculties (general education courses).

See Annex 9 for basic information on the teaching staff involved in the implementation of the SF. See the biographies (CV) of the teaching staff in Annex 10. See Annex 9 for proof of knowledge of the state language for SF lecturers,

The types of academic workload of the teaching staff, regulations on the volume of workload, the planning of work, accounting and control procedures are regulated by the workload planning and accounting procedure of the academic staff of RTA for the current academic year. RTA procedure has been elaborated in accordance with Cabinet of Ministers Regulations No. 445 “Regulation on remuneration for teachers' work” (“Pedagoga darba samaksas noteikumi”) and provides for a full-time professor, associate professor 900 hours per year, an assistant professor with a doctor’s degree - 950 hours per year, an assistant professor without a doctor’s degree, lecturer, assistant - 1000 hours per year. The academic load consists of the work of the teaching staff in the classroom, consultations, conducting of research work, evaluation of the study outcomes.

The scientific work of the staff elected in the scientific position shall be carried out in accordance with the provisions of planning, accounting, control and payment of the scientific workload at RTA. The scientific workload consists of scientific projects / contract work, scientific publications, research work (if the research staff is studying for a master's or doctoral degree) and other forms of scientific work.

If the scientist is at the same time elected to the academic position of professor, associate professor, assistant professor, lecturer or assistant, RTA shall ensure that the total annual workload does not exceed the number of hours determined by labour law.

The academic load of the teaching staff employed in the study direction, like at RTA in general, prevails over the volume of scientific work. This is due to three factors:

- firstly, according to the legislation of Latvia, the monthly base salary per researcher corresponds to 50 percent of the professor's lowest monthly salary rate, which weakly motivates teaching staff to become more involved in scientific research;
- secondly, scientific activity is linked not only to the teaching load, but also to professional activity in the field or to administrative duties at RTA, which limits the opportunity to be involved in large-scale research projects;
- thirdly, the didactic strategy of the first level SP is more focused on the development of professional competence.

**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 provide a successful higher education environment, RTA provides both physical resources (libraries, study equipment and IT infrastructure) and human resources (teaching staff, study consultants and other advisors). In addition to the aforementioned RTA administrative units (Dean's Office, Study Department, Science Department, External Relations Department, etc.), RTA offers to its students:

- individual psychologist services on the psychological issues of organizing personal studies, psychological interrelations, etc. issues related to studies and communication in the study process. RTA offers individual and group classes. Exercise-trainings for *interaction, relationship building skills and formation of "I" image* are possible. The service is offered by a practicing psychologist. Consultation for RTA students is free of charge.
- individual career counselling services to help students better identify their interests, skills, opportunities and values, deepen their understanding of career choices, and professional suitability, to study about their personality and occupational characteristics, to obtain up-to-date information on career issues, to get support for successful career planning, to make sure they have chosen the right profession. In the field of career choice, RTA offers individual and group classes led by a certified career counsellor. Consultation for RTA students is free of charge. In addition to individual career counselling services, RTA operates the RTA [Career Portal](#), (Latvian only) where information on professional internship, work and volunteering opportunities is regularly posted.
- the possibility to create an individual study plan for independent studies, which is supported by RTA in cases when the student is working or due to family circumstances cannot fit into the common study schedule. It is determined by [RTA student regulations](#).
- in order to facilitate the availability of up-to-date information for students, a special section for students has been created in the RTA internal document management system, where current information on the study process is compiled and supplemented.

At the RTA Faculty of Engineering, a mentor (usually the program director) is attracted to the groups of 1st year students, which helps students to integrate more successfully into the academic environment. Each lecturer has an official consultation time once a week, when students can come to him and receive help with incomprehensible issues in the study courses led by the lecturer.

RTA lecturers and employees follow the principle of organizing the study process so that it is available to the student. Due to the relatively small number of students, every student of the Faculty of Engineering has the opportunity (without prior appointment, practically at any time when the employee is not busy in classes or meetings) to receive consultations from laboratory assistants, engineers, lecturers and administrative staff on issues related to the student studies and research activities, laboratory / workshop facilities and equipment, etc.

Special attention in 2020 and 2021 is paid to the support of students in the conditions of distance learning, organizing informative and consultative events for work in the e-environment.

## 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).**

In 2013 RTA has been entered in the Register of Latvian Scientific Institutions (reg. No. 1172165) as a scientific institution. Its research objectives are defined in the [Strategy for Scientific work 2019-2023](#), which derives from the RTA Strategy. The goal of RTA's scientific work is to *develop the*

*knowledge-based economic development potential by providing technological excellence and transfer to the development of entrepreneurship and economy.* Its main tasks are to provide science, research and innovation in line with the research directions defined in the RTA's strategy for action and development, to develop scientific research capacity, to increase the number of people employed in science, to renew and develop human resources, technology and innovation in science, to promote international excellence and quality and maintain and improve scientific infrastructure.

1. Synergy of academic and scientific work in the study direction (17 out of 38 lecturers employed in the study direction (45%) have been elected in both pedagogical and scientific positions);
2. Every two years, RTA organizes an international scientific-practical conference "Environment. Technology. Resources", which brings together scientists from more than 15 countries; the 13th conference was arranged on June 17-18, 2021. 157 articles were accepted, with the participation of scientists from 10 countries (Belarus, Bulgaria, Estonia, Italy, Russia, Latvia, Lithuania, Poland, Germany, Turkey). The conference proceedings are indexed in the SCOPUS database. Its articles are freely available on the RTA website <http://journals.rta.lv/index.php/ETR>.
3. RTA IF annually organizes the international student-practical conference "Human. Environment. Technology". The 25th conference took place on April 21, 2021. The conference proceedings are available at <http://journals.rta.lv/index.php/HET>.
4. RTA organizes an annual scientific conference "Society. Integration. Education." with scientists from over 20 countries; as a part of the conference, a series of articles are published, which has been published since 2016. December is available free of charge on RTA's electronic site <http://journals.rta.lv/index.php/SIE>.

The involvement of the academic staff in scientific research is facilitated by the activities of the Institute of Engineering Sciences (IZI), the Scientific Institute of Regional Studies (REGI) and the Scientific Institute of Business and Social Processes (BSPP), 15 or 40% of the involved study field academic staff are leading researchers and researchers.

The scientific activities of the SF are provided by the Ministry of Education and Science, which operates in accordance with the RTA Strategy and the Scientific Activity Strategy. The aim of the institute is to conduct research in the field of engineering sciences and technologies, to perform research contracts in engineering sciences and related interdisciplinary fields to ensure research and scientific activity, access to science-based higher education, knowledge transfer in the national economy and cooperation with the sphere of production for the growth of the Latgale, Latvian, European economy. Research at the Institute is carried out both as a systematic research of the academic staff in the fields of competence and as a part of the study process, implementing the respective RTA SP. The institute:

- carries out research activities in the field of engineering and related interdisciplinary fields;
- performs commercialization of scientific research results, integration into the study process and national economy;
- promotes the integration of human resources into the international scientific community in the field of engineering, strengthening the links between entrepreneurs, the public sector and the RTA;
- involves the staff of the Institute and RTA students in scientific projects;
- creates the environment and conditions for innovative research and activity;
- on the basis of mutual agreements to ensure cooperation with other research, industrial and academic partners of the Institute's field, for the performance of academic research and

industrial orders;

- ensures the publicity of the Institute's research results in scientific periodicals, monographs and international databases;
- organizes and participates in conferences, etc. scientific activities.

The Institute, as a new structural unit of the RTA, have to strengthen and develop its scientific potential in the next 6 years. At present, the Institute has a network of basic academic and scientific staff, which is ready to contribute to the development of science. In addition, taking into account the technological provision of RTA and the development of science-based technologies, the academic staff is ready to transfer their knowledge to students, creating new and innovative solutions in the field of engineering and technology.

The main activities of the institute:

- electrical engineering, electronics, information and communication technologies;
- mechanical engineering and mechanics;
- **material science**;
- environmental engineering and energy;
- **other engineering sciences and technologies**, including food and beverage technologies, textile and leather design technologies.

The connection of the study process with research in the field of public information is also confirmed by the active participation of the teaching staff and students of the study field in the annual events of the European Researchers' Night. For example, see an overview of the activities of this event over the last few years at: <https://2021.rta.lv/aktualitates/1579>

The activities of SF SP are characterized by an **integrated interdisciplinary approach**, which provides contacts with different fields of activity and sectors, preserving the specifics of engineering, as well as including, for example, current events in the field of design and art. See Annexes 12, 13, 21 for the current events of the SP and its artistic creativity.

#### **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.**

One of the main tasks of the RTA strategy is the implementation of a science-based study process. The requirements for scientific research in the fields of study at the RTA are defined in accordance with the descriptions of knowledge, skills and competencies in accordance with the Latvian Qualifications Framework (LQF), which provide for certain skills, knowledge and competencies in each program group.

Linking scientific research with the study process in the SF is also realized by teaching staff and students participating in scientific and scientific-practical conferences, seminars and other public events. Within the framework of the Engineering Days at the RTA annual international student scientific-practical conference "Human. Environment. Technology. " (held in April) is attended by representatives from both the RTA and other higher education institutions.

The Engineering and Manufacturing Technologies section offers to give lectures on topics such as laser cutting, the use of 3D printing technologies in clothing design, uniform design, etc. at the applied research level.

In 2020, following epidemiological security measures, the conference was held remotely in the Microsoft Teams environment. It was attended by 46 RTA students with 35 lectures. Due to the fact that the first level professional higher education SP “Fashion Design and Technology”, “Food Processing” is not strictly focused on the research component, topics related to these fields often appear in an interdisciplinary aspect at the student conference, they focus on level of applied research.

At the conference of 2019, 24 scientific articles were read and published in the collection of scientific articles, including two from Russia - one in partnership with Mitvaide University in Germany (10 of them in mechatronics, product technology and environmental protection). Conference materials are published in paper format, and since 2019 only electronically. They are available in the RTA open access database <http://journals.rta.lv/>.

SF SP students annually participate in the scientific-practical conference of the RTA (see Annex 22), as well as in other conferences in Latvia or abroad, presenting the research on topics related to the field of study. Participation of students and lecturers in conferences at co-operation universities outside Latvia: in Lithuania, Russia (**15 papers / presentations / posters in total**) see in Annex 22.

From 2012 to 2017 the RTA organized the International Scientific-Practical Conference “Art and Music in Cultural Discourse”, in which lecturers and students of the SF SP “Fashion Design and Technology” participated in workshops and the Design Section with interdisciplinary research (S.Mežinska, I.Fetjko, I.Lesničija, e.o.) (see Annex 22).

The connection of the study process with research in the field of public information is also confirmed by the participation of the SF lecturers (S.Mežinska, L.Litavniece, I.Silicka, e.o.) and students in the annual events of the European Scientists' Night since 2012 with creative workshops, master classes, fashion shows, linking the current topics of the event and the SF, offering master classes-tastings (2014), demonstrations (2015), exhibitions, competitions (2016), creative workshops (2017) creative competitions-experiments (2018), interactive lessons (2019), video presentations (2020) etc. (see Annex 22).

SF SP has an interdisciplinary specificity, the staff employed in the programs represents not only the food and textile industry, but also the arts, engineering, ICT, law and economics. It promotes interdisciplinary research of lecturers.

The results of the scientific activity of the teaching staff are available to students in several ways:

1. In teaching study courses, lecturers use the results of their research and guide students in the methodology of research work;
2. Scientific publications of the teaching staff are available and are encouraged to be used in study research works;
3. Students have the opportunity to listen to the lecturers' presentations on current issues in the field at scientific conferences.

The scientific activity of the teaching staff is an essential part of the study process. It has a significant impact on the promotion of students' scientific activities.

SV SP lecturers in relevant fields have presented the results of scientific research in Latvia (RTA, RTU, LU, LLU), other countries (Lithuania, Poland, Bulgaria, Spain, etc.), scientific publications have been published in databases of scientific articles (EBSCO, SCOPUS, Thomson Reuters ISI Web of Knowledge, etc.) (see Annex 14).

The teaching staff of SV SP (A.Strode, A.Martinovs, S.Martena, K.Laganovska, etc.) are reviewers of the collections of scientific publications of the RTA international scientific conferences, experts of

the Latvian Council of Science (L.Litavniece, A.Strode, S.Martena).

The research activity of the teaching staff basically corresponds to the study courses to be taught. For instance: " Launching of Entrepreneurship" lecturers J.Volkova, Ē.Višķers have research in economics, business; A.Strode, lecturer of "Computer Graphics", studies Latvian design education, methods of developing design thinking; S.Mežinska, lecturer of "Apparel Design", studies the application of advanced technologies (laser processing, 3D printing) in the design of textile products, aspects of the product design process; D.Apele, lecturer of " Language and Composition of Visual Art", " History of Design and Modern Trends", studies aspects of artistic and creative activities, product design development. Lecturer of the food processing program I. Silicka has research in the development and commercialization of new food products, evaluation of the quality of catering companies, docent R. Tretjakova conducts research in the field of development of new cosmetic products, etc. (see Annex 22).

Since 2016 RTA works purposefully with the students of the program, encouraging them to get involved in the work of scientific institutes in order to develop their qualification papers in the field on the basis of them. Thus, students join an interdisciplinary team of researchers, which provides an opportunity to discuss complex or systemic aspects of the relevant field of science / professional field, specialists in the relevant field or interdisciplinary field, including the development of joint scientific publications.

Activities of RTA lecturers and students in scientific research to gain experience, practical knowledge in research development (data collection and compilation on the use of technologies in textile processing, participation in experimental development, research of methods, participation in service contracts for entrepreneurs, development of study and qualification papers), development of professional and research competencies in the field of fashion design and food processing:

- RTA scientific grant projects and commissioned research (see sub-paragraph 2.4.5, Annex 22):
- **In the field of fashion design and technology** (leader / participant is a lecturer, researcher S.Mežinska in cooperation with leading researchers Prof. L.Ļazovs, assistant professor R.Tretjakova, assoc.prof. I.Kangro, assistant professor A.Kaupužs, etc.): in the period 2017-2021: **6 lecturers, 16 students**.
- **In the field of food processing** (supervisor / participant is a lecturer, researcher I.Silicka in cooperation with leading researchers, assoc. professor L.Litavniece, etc.): in the period 2017-2021: **7 lecturers, 18 students**.

**(In total there were 11 RTA grant projects, commissioned researches)**

- in other applied and commissioned researches, competitions. (see Annex 22)

(In total, there were 10 projects in the reporting period, in which 15 lecturers and 42 students participated).

On the basis of these projects, students developed their own study projects, but some also developed qualification papers. Students' participation in scientific research projects also significantly contributes to the quality of the study process: students face a real problem that needs to be solved, it creates a real interest in students going through all stages of a research / design project - from literature and analogue research to finished prototype or technology development.

**2.4.3. Description and assessment of the international cooperation in the field of scientific research and/or artistic creation by specifying any joint projects, researches, etc. Specify**

**those study programmes, which benefit from this cooperation. Specify the future plans for the development of international cooperation in the field of scientific research and/or artistic creation.**

In the SF, the RTA regularly participates in international projects, which are not so much related to fundamental as to applied research and development of new methodologies in the study process in engineering. As a result of participation in international projects, the winners are lecturers and students of both SF SP "Fashion Design and Technology" and "Food Processing".

International cooperation of the SF SP teaching staff:

- together with Ukrainian researchers (Kryvyi Rih Economic Institute SHEE "Kyiv National Economic University named after Vadym Hetman") actively participates in the international scientific conference of the RTA Institute of Regional Studies "Society. Integration. Education." and publishes scientific articles in the conference proceedings (included in the Web of Science database); <http://journals.rta.lv/index.php/SIE> (2 lecturers);
- SF professors (L.Litavniece, A.Strode, A.Martinovs) are involved in the scientific organizing committees of international scientific conferences and collections of articles, also as reviewers, for example, International Scientific Conferences Society. Integration. Education. (<http://journals.rta.lv/index.php/SIE/about/editorialTeam>), Environmental. Technology. Resources.
- *Interreg V-A Latvijas-Lietuvas pārrobežu projekts LLI 186 Creazone 2.0*. Leading Partner: Kaunas University of Technology (Lithuania). Partners: Lithuanian Business Confederation (Lithuania), Ventspils University of Applied Sciences (Latvia) and Latvian Chamber of Commerce and Industry (Latvia) (lecturers and students (A.Tutiņa, etc.)).
- *Interreg V-A Latvijas-Lietuvas pārrobežu projekts No: LLI-184 "SalesLabs for employability competencies development* / Improvement of employment competencies in sales laboratories " Project duration: 01/07/2017 – 30/06/2019, developed products and services (project activities in cooperation with 7 Latvian companies, their presentations in Lithuania and Latvia, 5 lecturers of the SF (I. Silicka, S.Gaile , I.Dembovska, S.Mežinska, D Apele), 14 students (see Annex 22).
- ESF project Effects of structural and Social Change on Municipalities in Germany and the Baltic States (ClimBinG) 2018/5;
- ERDF project KC-PI 2020/61 "Extruded field bean flour food development technology and product applications" Operational programs 1.2.1. Specific support objective "Increase private sector investment in R&D" 1.2.1.2. within the framework of the measure "Support for the Improvement of the Technology Transfer System". Project team member - technology development, testing in artificial and real environment (**5 lecturers, 2 students**);
- ERDF project KC-PI 2020/63 "Development technology and development applications of hiking food" Operational programs 1.2.1. Specific support objective "Increase private sector investment in R&D" 1.2.1.2. within the measure "Support for the improvement of the technology transfer system" (**5 lecturers, 2 students**).
- SP "Clothing Design and Technology" lecturers and students (see Annex 22):
- participation in International scientific-practical conferences in cooperation universities: in **Lithuania, Russia**, presentation of research on topics related to the field of study (**a total of 15 reports / presentations / posters during the period**).
- Participation in **competitions-shows of young designers at cooperation universities since 2012**: in **Lithuania** (Apkalbos, (Kaunas), Virus Moda (Utena), Vilnius); In **Russia**, at

the Pskov Design Festival (**a total of 16 shows and competitions during the period**).

- International Digital Art Project of the EU Program “Creative Europe” “**European Connections in Digital Arts - EUCIDA**” No.: 570594-CREA-1-2016-1-IE-CULT-COOP1ES program “Creative Europe” together with Rēzekne County Council. 2018-2019.
- Execution of the service contract of the State Security Agency (SEA), implemented in cooperation with industry companies in Latvia, **partners abroad**, textile manufacturers, clothing designers: **MAK JSC (Bulgaria), Proflin (Estonia)**. Preparation of technical documentation for the project Development of everyday uniform design for institutions subordinate to the Ministry of the Interior. **2015-2018**.

The mentioned projects have a positive impact on the implementation process of the SV SP, as the projects employ lecturers, increase the qualification of lecturers, improve foreign language skills, acquire new cooperation partners and the opportunity to take over their experience. Lecturers can pass on the acquired knowledge and skills to their students.

SF SP's future plans for international cooperation in scientific research and / or artistic creativity development are related to the **continuation of cooperation**:

- with existing partners in **Lithuania**, Kaunas, Vilnius, Utena Universities of Applied Sciences; In **Estonia**, Tallinn University of Applied Sciences, joint research on laser processing of textile fabrics at the RTA Research Center for Physical Processes and Laser Technologies (Prof. Ļ. Lazovs, S. Mežinska), **Russia**, Pskov State University; In **Bulgaria**, MAK AD, Eurocenter Education, Science, and Innovation; Participation in projects, competitions for young designers - exhibitions in Kaunas "Apkalbos", Utena "Virus Moda" (Lithuania), exhibitions.
- with existing partners in **Bulgaria**, Plovdiv University of Food Technology; In Lithuania, Kaunas, Utena Universities of Applied Sciences and RTA Research Center for Chemistry, Biology and Biotechnology, commissioned research in the development of new food products, scientific research (assistant professor R. Tretjakova), participation in projects and grant competitions, e.g. “Innovative idea for food development and production” (SIA Ģemoss), in the annual food quality competition “Novada Garša” organized by the Rural Consultation and Education Center, etc.

SF plans to **expand cooperation** in the field of fashion design:

- with Technical University Sofia, Ruse Angel Kanchev University (**Bulgaria**), Kaunas University of Technology (**Lithuania**), which offers equivalent study programs - Fashion and Textile Design and Technology at Bachelor's level, Textiles and Clothing the employers' organization SCIAT in Ruse (**Bulgaria**), whose cluster members are small and medium-sized enterprises, universities, NGOs. The direction of cooperation is focused on the improvement of RTA SP, development of distance learning programs, cooperation between universities and companies in response to employers' demand for specialists in CAD, CAM, CAE and PLM systems, industry requirements for research in textile and clothing engineering design and production on programmable equipment as well as business promotion. These universities, in cooperation with 12 European partners in the ICT-TEX project, have developed and are implementing such programs for the training of textile and clothing engineering design and manufacturing specialists.
- with Warsaw University of Applied Sciences (**Poland**) and Vasil Levski National Military University (**Bulgaria**) provides laser research on textile fabrics at the Research Center for Physical Processes and Laser Technologies (Prof. Ļ. Lazovs, lect. S. Mežinska).
- with foreign companies for professional internship: Utena knitwear (Utena, Lithuania), MAK JSC (Gabrovo, Bulgaria).

SF plans to expand cooperation in the field of food processing:

- with the Food Technology University-Plovdiv (**Bulgaria**), which implements an equivalent study program - Food Technology and quality at the bachelor's level. The direction of cooperation is focused on the goals of RTA for the development of distance learning programs, Plovdiv University of Food Technology is already implementing such programs in the training of food industry specialists.
- together with Kaunas University of Applied Sciences (Lithuania) plans to conduct joint research for the production of lyophilized food of plant and animal origin from local and biological products (I.Silicka, R.Tretjakova).
- with Latvian and foreign companies for the provision of professional internship: JSC "Utenos pienas", SIA "BIOVELA-UTENOS MESA", SIA "Geld Baltic" - "Supergarden" etc. (**Lithuania**).

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

The involvement of RTA faculty members in scientific research is governed by the "[Regulations on Scientific Activities at RTA](#)" ("Nolikums par zinātnisko darbību RTA"), which stipulates that scientific work is a mandatory part of the academic staff's work. This can be done in the form of academic work as a researcher (leading researcher, researcher or research assistant), scientific research technical staff, scientific research service staff. Exceptionally, the Regulations stipulate that scientific work in the workload may not be planned if the academic staff perform full-time or part-time administrative duties at RTA or if the academic staff is elected as the academic staff of professional study programs and its main task is to ensure the acquisition of practical knowledge and skills in professional study programs.

Out of 38 lecturers employed in SF study programs, 17 lecturers simultaneously perform the duties of a leading researcher or a researcher.

The involvement of the academic staff in scientific research at RTA is encouraged in several ways:

- Since September 2018, RTA has joined the EURAXESS Latvia Network of Contact Points **to provide information and advice to foreign researchers on scientific career opportunities** at RTA, as well as to provide practical support to foreign researchers in mobility and their family members who wish to work and live in Latvia. In addition, the EURAXESS Latvia Network of Contact Points provides information and contacts for support abroad, both in Europe and worldwide, for researchers planning to participate in an outgoing mobility.
- RTA uses **project funding** to support and motivate its research staff. In 2018-2022 RTA is implementing the project "Support to international cooperation projects in research and innovation at RTA", No. 1.1.1.5/18/I/012, which provides financial support for Horizon2020 projects.
- A research support fund has been set up at RTA to provide financial support until 2020. 400 EUR per year, from 2020. - 200 EUR per year for each research staff member to attend conferences / to be published in international scientific publications.
- RTA foresees that research units' **performance funding** can be used for various research

support activities, including allocation of a coefficient to the academic staff employed in the unit, increased workload for the research staff employed in the unit, introduction of new workloads of research staff, conference fees and business trip expenses etc.

- RTA staff have **financial incentives** when publishing in RTA collections of scientific articles, including publications indexed in international databases.
- RTA announces **internal scientific grants** to promote the involvement of students and partners in research.

Indirectly, the support provided by the RTA for research activities increases the competitiveness of the teaching staff, allows them to freely choose their research topic or to participate in larger research projects. RTA provides scientific mobility and the opportunity to establish national and international scientific partnerships.

See the list of publications by the teaching staff in the reporting period in Annex 13.

Artistic creativity activities of the teaching staff in the reporting period, participation in projects can be seen in Annex 12, 22 Information about lecturers' scientific activities, publications, patents, projects, achievements, etc. can be seen in their CV for the last 6 years (Annex 10).

**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.**

The content and volume of students' research work is determined by the content of the study program and the work plans of the scientific units. See table 2.4.5.1. for the structure of students' scientific work.

Table 2.4.5.1.

**Structure and volume of students' scientific work**

<b>Study program</b>	<b>Study courses</b>	<b>Study work</b>	<b>Qualification paper</b>	<b>Total amount of scientific work</b>
Fashion Design and Technology	Introduction to Research (2 CP)	Semester Project (2 CP)	Qualification paper (8 CP)	12 CP
Food processing	Introduction to research (1 CP)	Semester Project (2 CP)	Qualification paper (8 CP)	11 CP

Although the specifics of the SP envisage the acquisition of basic professional competencies, without emphasizing the creation of significant innovations and research work, in addition to the basic module shown in the table, elements of research work are included in the study course content, involving students in scientific research and artistic creation activities.

The topics of the qualification papers are focused on novelty, in most cases they are related to the solution of the user's needs or business problems, the work may include the performance of a research-related task, such as the use of advanced technologies in product design. All laboratories and workshops of the RTA Faculty of Engineering are freely available to students for research work; according to the laboratory base, the student is free to choose the research topic, receive consultations from lecturers and technical staff; the state qualification examination committee in the defence of the qualification paper gives an opinion (high / low) regarding the commercialization potential of the obtained results. If the potential for commercialization is assessed as high, then the RTA considers the issue of patenting the obtained results.

The aim of scientific grant projects is to involve students of the RTA and lecturers in scientific research, providing them with practical knowledge in the development of scientific research. SF SP "Fashion Design and Technology" involved 16 students in research grant projects (data collection and compilation on the use of 3D printing and laser technologies in textile processing, participation in the development of experiments, participation in the performance of service contracts for entrepreneurs, development of studies and qualification papers); SP "Food Processing", 18 students (research of methods, development of recommendations, development of new products, etc.).

- RTA research grants and commissioned research projects:
- SP **"Fashion Design and Technology"**
- May 2020 - December 2021 "Use of 3D printing technologies for the production of orthopedic prototypes" and "Design solutions for functional products for children with autism spectrum disorders" (supervisor: assistant professor A.Kaupuzs, S.Mežinska), **6 students**;
- August 2018 - September 2019 "Use of laser technologies for innovative solutions in textile and leather products" (supervisor Prof. Ļ. Lazovs, S. Mežinska), **4 students**;
- March - December 2018 7.6.3 / 51.2-2018 "Interdisciplinary research on the application of laser processing (laser engraving, laser cutting) technologies in textile materials" (supervisor Prof. Ļ. Lazovs, S. Mežinska), **6 students**;
- 2018 - March-May 2019 7.6.3 / 52.2-2018 "Use of 3D printing technologies in textile design", (supervisor assoc. prof. Kangro, S.Mežinska) **3 students**;
- February-December 2017 "Innovative solutions in clothing design, integrating textile laser processing technologies" (supervisor Prof. Ļ. Lazovs, S. Mežinska), **4 students**;

#### SP **"Food processing"**

- In 2017, the project "Quality assessment of catering companies in Rēzekne city" (supervisor assoc. prof. L.Litavniece, I.Silicka, etc.), **4 students**;
- In 2018, the project "Research of lake sediments as a valuable raw material in cosmetics and medicine with instrumental tests" assistant prof. R.Tretjakova
- Operational programs 1.2.1. Specific support objective "Increase private sector investment in R&D" 1.2.1.2. projects under the measure "Support for the improvement of the technology transfer system":

KC-PI\_2020 / 63 project "Hiking food development technology and development applications" (I.Silicka, S.Gaile, Ē.Teirumnieka, **2 students**);

KC-PI\_2020 / 61 project "Extruded field bean flour food development technology and product applications" (S.Gaile, Ē.Teirumnieka, I.Silicka, **2 students**);

- Commissioned research: No.BIZN-PAK-2019 / .2019-2020 Development of research on technological process of production of products of plant origin for the service recipient SIA “Nature Line”, using sublimation forge with vacuum and refrigeration system, development of production technological process (project manager I .Silicka, engineer S.Gaile, I.Bernāne, **6 students**);
- Commissioned research No.9.17 / 2019-03-01 Research of the culinary heritage of European nations and development of creative workshop programs and their approbation (I.Silicka, S. Gaile., D.Gricika and **3 students**);
- Commissioned research No.9.17 / 2020-12-1 Evaluation of equipment and packaging for food products in the project “Establishment of a Packaging Workshop” (I.Silicka, D.Gricika **1 student**);
- Commissioned research 9.17/2021-10-01, to carry out research and develop a methodology for the preparation of fermented garlic for drying using the lyophilization method, to carry out drying and to package the product in a suitable package. Develop recommendations for possible packaging materials for dried product. (I.Silicka, D.Gricika **1 student**).
- Participation of SP “Fashion Design and Technology” students with the developed clothing collections, gaining recognition, in the competitions of young designers - shows in cooperation universities outside Latvia **since 2012**: in **Lithuania** (Apkalbos-Kaunas, Virus Moda-Utena, Vilnius); In Russia at the Pskov Design Festival (**a total of 16 shows-competitions**); In 2020, 2 students participated in the competition of young fashion designers “Fashion Manifestation” organized by the Latvian Chamber of Fashion (see Annex 22).
- SP “Fashion Design and Technology” students' professional development in performances, exhibitions, shows, showing the results of their experimental research activities, for example, experimenting in digital art, using laser technology in material processing, 3D printing, integrating electronics into design products in studies and qualifications (**in total during the period 9 exhibitions in Latvia, 7 master classes, workshops** within the framework of projects, **8 costume shows**, scientists' night events, business exhibitions, schools (see Annex 22).

Improvement of professional skills of SF SP students during **2012-2020**, actively participating in **professional workshops** “Fashion Design”, “Nutrition Laboratory” in the field of interest education organized by Rēzekne Municipality for school youth, as well as in several projects (see Annex 22).

**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.**

In order to improve the quality of the RTA study process, it follows that new scientific, technical, social, cultural or other field ideas, developments and technologies are applied in the study process and are aimed at achieving RTA's strategic goals. Particular attention is paid to RTA indicators related to the study process, such as the relevance of study programs to current business development issues, industry needs, research-based studies, student-centered study process. RTA has developed and implemented the innovations as follows:

1. RTA has established a SF expert council, which evaluates the compliance of SP results with

the needs of the branch and recommends improvements in the content of the study programs and didactic strategy. The composition of the Expert Council of the study field based on the RTA Senate decision No.4 of February 26, 2019 "Regulations on the Expert Councils of the Study Fields at Rezekne Academy of Technologies" ("Nolikums par studiju virzienu ekspertu padomēm Rēzeknes Tehnoloģiju akadēmijā") was approved by the RTA IF Council on April 21, 2021. The Expert Council of the study field is composed of professionals in the field of business: SIA Sonika director, SIA LaPizza director.

2. RTA lecturers' quality of work is evaluated on the basis of student-centered approach criteria and evaluation of the lecturer's contribution to the development of the professional, scientific competence of students. The quality of work ratio determines the remuneration of the teaching staff for the following year.
3. 4 lecturers (S.Gaile, I.Silicka, S.Mežinska, D.Apele) involved in the Interreg project No: LLI-184 (Latvija-Lietuva) "SalesLabs for employability competencies development" "Improvement of employability competences in sales laboratories" introduced problem-based learning method (PBL) in their study courses.
4. ICT facilities: digitalized student registration for semesters and courses, digitalized student attendance system, etc.
5. In 2015, the RTA established the Eastern Latvia Technology High School, which promotes the **connection and continuity of secondary and higher education in the fields of STEM;**
6. **SF students and graduates use the service provided by Rēzekne Business Incubator** both in pre-incubation and incubation when starting their own business.

In order to optimize the use of financial resources allocated to the study process, there are joint lectures for RTA students in all fields of the following courses: Launching of Entrepreneurship, Environmental and Civil Protection, Labour Protection, Introduction to Humanities. The Faculty of Engineering also combines lectures for students from different fields to make the study process more profitable, for example, Applied Mathematics, Material Sciences, Project Management, etc. courses lectures are given in large combined groups.

## 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.**

Cooperation in the study direction is developed in two essential aspects:

1. In cooperation with employers, regional governments, industry companies
  - provision of student professional internship;
  - participation in the organization of events (discussions);

- participation in the organization of the Career Day event;
- participation in National Final Examination Commissions;
- participation in the development of strategic documents;
- visiting lectures for students and staff;
- work-based studies (RTA staff - professionals);
- study tours;
- recommendations for research topics (entrepreneurs, Bank of Latvia);
- in-service training of academic staff;
- students' general education activities: study tours.

In order to strengthen cooperation with employers, RTA offers employers to participate in guest lectures and seminars organized within RTA network. Employers participating in the Study Expert Council can attend free of charge professional or informal education programs offered by the Centre for lifelong learning and have the opportunity to work on joint projects.

Study tours are organized for students every year to get to know the specifics of the profession:

- Textile and leather products design profession - guest lectures, excursions in cooperation with professionals, SIA Sonika, SIA NEMO, SIA Technical Textiles, SIA EcoEmi, SIA Firma Jata, SIA Gefa Latvija, SIA Gaross, SIA Spectre Latvia, Utena knitwear (Lithuania), Proflin (Estonia),
- In the food processing industry in cooperation with professionals, for example, SIA Rēzeknes gaļas kombināts, Z/S Ķotiņi, SIA Vlakon, SIA Lekon, SIA Margret, Z/S Liepkalns, SIA Biržu Dona (Lithuania), etc.

See the list of SF cooperation agreements in Annex 14.

It is planned to expand cooperation with Latvian companies to ensure professional internship.

- Strategic partners in the Textiles, Clothing, Leather and Leather Products and Food industries:
- **Latvian Designers' Society** (3 lecturers are members of the Latvian Designers' Society) (Exhibition of design program students' diploma projects in the exhibition "Design Isle" organized by LDS and in the competition "Annual Design Award");
- **Latvian Employers' Confederation (LDDK) Sector Expert Council** (NEP) in the textile, clothing, leather and leather products industry;
- **Provision State Agency (NVA)** (service agreement "Development of daily uniform / uniform designs for the MoI, VP, SFRS of the MoI system services");
- **Association of Light Industry Enterprises** (VRUA);
- **Latvian Investment and Development Agency (LIAA), Rēzekne Business Incubator,**
- **Latvian Chamber of Commerce and Industry** (RTA is a member, also works in the LCCI Latgale Council, LCCI Knowledge Economy Council);
- **Rēzekne Entrepreneurs 'Association** (RTA is a member, also works in the Council), participation in the events of the exhibition "Entrepreneurs' Days in Latgale";
- **Rēzekne Municipality** (participation in the ESF project "European Connections in Digital Arts -EUCIDA" master classes and exhibitions of creative and research works);
- **Rēzekne Special Economic Zone (RSEZ);**
- **Austrumlatgale Creative Services Center** (cooperation agreement on the use of the

centre's sewing workshop equipment).

- **Rēzekne City Municipality Agency “Rēzekne Culture and Tourism Center”** (cooperation in the development of design projects, exhibitions of works by students and graduates of RTA design study programs);
- **Latvian Chamber of Fashion** (participation in the organized competition of young fashion designers "Fashion Manifestation");
- **Latvian Employers' Confederation (LDDK) Sector Expert Council (NEP)** in the Food Industry and Agriculture Sector, <http://www.losp.lv/node/4770>;
- **Latvian Federation of Food Companies (LPUF)** <https://www.lpuf.lv/>;
- **Rēzekne Municipality** (participation in master classes of creative and research work of Rēzekne Municipality project “Europe Direct information center in Austrumlatgale”).

2. **SF cooperation with the academic sector in Latvia**, with higher education institutions that implement similar SF, SP:

- **Rīga Technical University, RTU DTI**, textile testing in DTI textile research laboratory (service agreement), agreement on students' right to continue studies in case the implementation of programs at the RTA is terminated, with professional bachelor SP “Materials technology and design” specialization Fashion design and technology;
- **Latvia University of Life Sciences and Technologies**, its agreement on the right of students to continue studies in the later stages of studies professional bachelor SP Design and Crafts; agreement on the right of students to continue their studies in case the implementation of the Food Processing Program at the RTA is terminated (see Annex 5);
- **Daugavpils University**, cooperation in the field of studies and scientific research;
- **University of Latvia**, cooperation in the fields of studies and scientific research;
- **Balvi Vocational and General Education Secondary School**, creation and strengthening of the succession of vocational education;
- **Rēzekne Technical School**, promotion and strengthening of the succession of vocational education;
- **Rīga State Technical School, Krāslava territorial unit**, promotion and strengthening of the succession of vocational education;
- **Daugavpils Design and Art Secondary School “Saules skola”**, promotion and strengthening of the succession of vocational education;
- **Rēzekne Secondary School of Art and Design**, promotion and strengthening of the succession of vocational education;
- **Eastern Latvia Secondary School of Technologies**, linking secondary and higher education and succession in the fields of STEM.

Cooperation partners are selected according to the following criteria:

- partner's contribution to the development of SF SP;
- opportunities to jointly prepare applications for scientific projects, implement them;
- use of partner staff to conduct specific lectures and workshops;
- opportunities for students to have a internship; develop qualification papers and find a job in a partner company;
- opportunities for the RTA staff to do have in-service training with a partner; to ensure knowledge transfer to the RTA;
- opportunities to use partner resources to improve the RTA laboratory base;
- opportunities to increase / attract the number of RTA students in cooperation with a partner;

- influence of the partner on important processes that can bring benefits, stability and development to the RTA.

**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 strategic goal of RTA internationalization is to become an internationally competitive academy of engineering, social sciences and humanities integrated into the European Higher Education and Science Area with motivated, creative and labour market demanding students, as well as an open, dynamic academic and scientific environment for sustainable society development, at the same time promoting the international recognition of the study programs included in the study fields and sustainable transnational cooperation.

The tasks for the implementation of the strategic goal envisage:

- to ensure the acquisition of double and / or dual diplomas at the RTA;
- to ensure the export capacity of the study programs offered by the RTA;
- to attract high-level professors from abroad in the provision of the study process, including the supervision of master's and doctoral theses;
- to develop the implementation of internships abroad for both full-time and part-time students, to promote the development and implementation of integrated study programs and program modules in foreign languages for foreign students;
- to develop the content of study programs demanded in the international labour market in cooperation with internship places, employers, public administration institutions, professional organizations and associations;
- to develop co-operation with foreign higher education institutions (including in the CIS countries) for the improvement of study programs;
- to participate creatively in European education and science programs by supporting exchange of students, lecturers and staff.

RTA's international cooperation and internationalization policy is based on the Erasmus Charter 2021-2027, which is a written document issued by the European Commission, enabling RTA Study Fields to participate in Erasmus program activities. The Charter sets out the basic principles to be followed in organizing and implementing the activities of the Erasmus program. The main principles of RTA internationalization are set out in the ERASMUS Policy Statement. RTA is a member of the Latvian the Higher Education Export Association and develops cooperation with partners in Uzbekistan, China, Kazakhstan and India to attract students to the international higher education market.

Cooperation with the academic sector abroad takes place with universities that implement similar SPs, with which cooperation projects, applied research, creative, artistic creation competitions are implemented:

- **Vilnius University of Applied Sciences, Lithuania;** (participation in the Young Designers' Competition - shows, participation in scientific conferences, ERASMUS mobility, exchange of guest lecturers);
- **Kaunas University of Applied Sciences, Lithuania** (participation in the Young Designers Competition - shows in Kaunas "Apkalbos", participation in scientific conferences, ERASMUS mobility, exchange of guest lecturers); (cooperation in Erasmus + 2021 Blended Intensive programs (BIP));
- **Utena University of Applied Sciences, Lithuania** (participation in the Young Designers' Competition - shows in Utena "Virus Moda", scientific conferences, mobility of ERASMUS students and lecturers, exchange of guest lecturers);
- **Vilnius Academy of Arts, Faculty of Telšiai (Lithuania)** (ERASMUS student mobility, exchange of guest lecturers);
- **Tallinn University of Applied Sciences** (Tehnikakõrgkool TTK University of Applied Sciences) Estonia, participation in conferences, ERASMUS mobility, exchange of guest lecturers);
- **Pskov State University, Russia** (student scientific conferences, fashion show of young designers' collections at the Pskov Design Festival, visit to the International Scientific Conference at the RTA, exchange of guest lecturers);
- **Northern Lithuania College** (participation in the project "Interreg V-A Latvia - Lithuania Programme 2014-2020 SalesLabs for employability competencies development / cooperation with the business sector),
- **Assen Zlatarov University of Burgas (Bulgaria)** (ERASMUS mobility, exchange of guest lecturers);
- **Sofia University (Bulgaria)** (ERASMUS mobility, exchange of guest lecturers);
- **Plovdiv University of Food Technology (Bulgaria).** Cooperation with industry companies to provide support for research opportunities:
  - Bronet-Atanasov & Co (Bulgaria) (product design solutions and manufacturing);
  - MAX Laser (Bulgaria) (cooperation in product design research, development, improvement).

Cooperation with foreign institutions and companies in the reporting period is manifested in the following aspects:

- providing internship places for students;
- support for research opportunities;
- SF lecturers attending industry exhibitions (etc.);
- Providing recommendations for the development, improvement and updating of SP content.

**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.**

RTA has concluded more than 100 agreements within the ERASMUS + project. In order to promote the activity of the partners, international weeks are regularly organized, which ensure the implementation of the policy of internationalization of the study and research environment.

During the reporting period, lecturers from Lithuania, Estonia, Bulgaria, Poland and Turkey taught

within the mobility of the study field “Production and Processing” SP ERASMUS +.

During the reporting period, the teaching staff of the SF “Production and Processing” delivered lectures in Lithuania, Estonia, Poland, Bulgaria, Italy, Sweden, Turkey, Spain, Germany, Portugal, the Netherlands, Slovakia, Hungary, the Czech Republic and France within the framework of ERASMUS + mobility (see Annex 17).

Foreign students and lecturers participate in the annual international student and lecturer conference “Environment. Technologies. Resources”, which takes place once every two years and “Society. Integration. Education”, which takes place every year.

Foreign visiting lecturers are also attracted to the study process through various projects. On December 1, 2018, RTA started ESF project "Strengthening the academic staff of the study field "Mechanics and metalworking, heat power industry, heat engineering and mechanical engineering" and "Management, administration and real estate management" which envisages attracting highly qualified foreign lecturers, including in the implementation of the SP. The recruitment of foreign lecturers is done by means of a competition, by placing an advertisement on the EURAXESS portal.

In order to support the attraction of foreign scientists RTA has become one of the Euraxes contact points in Latvia with the mission of providing information and advice to foreign researchers on scientific career opportunities in Latvia since 2018, as well as providing practical support to foreign researchers in mobility and their family members who wish to work and live in Latvia. In addition, the EURAXESS Latvia Contact Point Network provides information and contacts for support abroad, both in Europe and worldwide, for researchers planning to go on outgoing mobility. EURAXESS is one of the European Research Area initiatives to promote international and intersectoral mobility of researchers in Europe and third countries and to support an open labour market for researchers.

## **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.**

The previous external evaluation of the SF was carried out in 2012, licensing and internationally accrediting the SP “Fashion Design and Technology”. The expert commission (Prof. R.Deltuvas, Prof. R.Milašius, Prof. R.Vokk, I.Skalbe, J.Bogužs, L.Apšeniece) evaluated the **quality, resources, sustainability and cooperation** of the SF. In its report, the commission emphasized the strengths of the study program implemented by the RTA, such as the interest of regional employers in further development of the SF and employment of graduates, well-prepared and based on current trends development plans, management system and quality assurance system, well-established cooperation with Latvian and foreign higher education institutions, industry and lower education institutions, etc. **Among the weaknesses**, the experts pointed to untested SF development plans due to the newly established direction, interdisciplinary research and publications with relatively little connection to fashion design, underdeveloped further education opportunities, a small number of academic staff with professional experience and / or education in fashion design, the limited

equipment for the field, including scientific, opportunities for further development in cooperation with local, national and international industry and professional associations in the study field. Experts mentioned the reduction of resources (reduction of human resources) and lack of leadership as possible **threats**. In turn, the experts pointed out good human resources, geographical location in the center of the region, higher education institution as the main **opportunities** of innovation and new business opportunities in the future.

SF worked purposefully to implement and enforce these recommendations. For an overview of the measures taken to implement the recommendations, see in Annex 18.

### **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).**

The previous external evaluation of the SP "Food Processing" was performed during the licensing period in academic year 2015/2016. The Commission of Experts (Professor Dr.soc.ing. Daina Kārklīņa, Head of the Department of Food Technology of the Latvia University of Life Sciences and Technologies, Assoc.prof. Dr.chem. Ida Jākobsone, Faculty of Chemistry of the University of Latvia) evaluated the licensing materials of the SP "Food Processing" - 41541, 360 pages (includes justification of the need for the SP; self-assessment of the program; content of the program and description of implementation (39 pages); approximately 260 pages, annexes) and met with RTA management, lecturers, entrepreneurs and potential employers during the visit. The compliance of the submitted documents with the requirements specified in the regulatory enactments in the field of education, including the regulated professions, the compliance of the SP with the higher education or college SF, the compliance of the academic staff with the SP implementation conditions and the requirements specified in the regulatory enactments in the field of education was evaluated, as well as the scientific articles published during the last six years by each representative of the academic staff in international peer-reviewed publications or five years of practical work experience, the study and information base (including the library), as well as the compliance of the financial and material base with the SP implementation conditions, SP content and implementation mechanism, the compliance of the financial and material base with the SP implementation conditions, the compliance of the SP content and implementation mechanism with the regulatory enactments in the field of higher education, the compliance of the SP objectives, tasks and study results, the compliance of the SP content with the acquired professional qualification and employment opportunities of graduates in the labour market were assessed.

In its report, the commission emphasized **the strengths** of the SP implemented by the RTA, such as the infrastructure created by the RTA, which creates a study environment for achieving good study results and guarantees the implementation of the SP and the achievement of study results; the interest of regional employers in the further development of the SP and the employment of graduates; well-prepared development plans based on current trends; management system and quality assurance system, emphasis was placed on well-established cooperation with Latvian and foreign higher education institutions, industry and lower education levels, educational institutions, etc. Among the improvement measures to be taken, the experts indicated the measures to be taken before obtaining the license (see Annex 18), which were carried out.

The SF worked purposefully to implement and enforce these recommendations. See Annex 18 for an overview of the measures taken to implement the recommendations.

# 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)		
List of the governing regulatory enactments and regulations of the higher education institution/ college	Annex 1.docx	1.pielikums.docx
The management structure of the higher education institution/ college	Annex 2.docx	2.pielikums.docx
II - Description of the Study Field - 2.1. Management of the Study Field		
Plan for the development of the study field (if applicable)	Annex 3-1.docx	3.pielikums.docx
The management structure of the study field	Annex 4.docx	4.pielikums.docx
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 5.docx	5.pielikums.7z
A document certifying that the higher education institution or college guarantees compensation for losses to students if the study programme is not accredited or the study programme license is revoked due to actions (actions or omissions) of the higher education institution or college and the student does not wish to continue studies in another study programme.	Annex 6.docx	6.pielikums.pdf
Standard sample of study agreement	Annex 7.docx	7.pielikums.docx
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 8.docx	8.pielikums.docx
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 9.xlsx	9.pielikums.xlsx
Biographies of the teaching staff members (Curriculum Vitae in Europass format)	Annex 10.7z	10.pielikums.zip
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 11.docx	11.pielikums.pdf
A statement of the higher education institution/ college on the respective foreign language skills of the teaching staff involved in the implementation of the study programme at least at B2 level according to the European Language Proficiency Assessment levels (level distribution is available on the website www.europass.lv, if the study programme or part thereof is implemented)		
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 12.docx	12.pielikums.docx
List of the publications, patents, and artistic creations of the teaching staff over the reporting period.	Annex 13.docx	13.pielikums.docx
II - Description of the Study Field - 2.5. Cooperation and Internationalisation		
List of cooperation agreements, including the agreements for providing internship	Annex 14.docx	14.pielikums.docx
Statistical data on the teaching staff and the students from abroad	Annex 15.docx	15.pielikums.docx
Statistical data on the incoming and outgoing mobility of students (by specifying the study programmes)	Annex 16.docx	16.pielikums.docx
Statistical data on the incoming and outgoing mobility of the teaching staff	Annex 17.docx	17.pielikums.docx
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 18.docx	18.pielikums.docx
An application for the evaluation of the study field signed with a secure electronic signature	4.9.31_20210103_iesniegums novērtēšanai ENG.edoc	4.9.31_20210103_iesniegums novērtēšanai LV.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		1.pielikums.7z
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		
<b>III - Description of the Study Programme - 3.2. The Content of Studies and Implementation Thereof</b>		
Compliance with the study programme with the State Education Standard		
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard or the requirements for professional qualification (if applicable)		
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)		
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme		
The curriculum of the study programme (for each type and form of the implementation of the study programme)		
Descriptions of the study courses/ modules		
Description of the organisation of the internship of the students (if applicable)		
<b>III - Description of the Study Programme - 3.4. Teaching Staff</b>		
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
20.pielikums.docx	20.pielikums.docx
Annex 20.docx	Annex 20.docx
21.pielikums.docx	21.pielikums.docx
Annex 21.docx	Annex 21.docx
22.pielikums.docx	22.pielikums.docx
Annex 22.docx	Annex 22.docx
23. pielikums.docx	23. pielikums.docx
Annex 23.docx	Annex 23.docx
RTA_Programmu_attistiba_konsolidacija_2018.pdf	RTA_Programmu_attistiba_konsolidacija_2018.pdf

# Fashion Design and Technology (41542)

Study field	<i>Manufacture and Processing</i>
ProcedureStudyProgram.Name	<i>Fashion Design and Technology</i>
Education classification code	<i>41542</i>
Type of the study programme	<i>First level professional higher education study programme</i>
Name of the study programme director	<i>Silvija</i>
Surname of the study programme director	<i>Mežinska</i>
E-mail of the study programme director	<i>Silvija.Mezinska@rta.lv</i>
Title of the study programme director	<i>Mg.sc.ing., Mg.paed.,Mg.design, lektore</i>
Phone of the study programme director	<i>+371 29716353</i>
Goal of the study programme	<i>In accordance with the requirements of the labour market (Textile and leather products designer profession standard) and the requirements of the first level professional higher education (education standard) to ensure the acquisition of the 4th qualification level (5th LCI level) professional higher education in textile and leather products design, specializing in fashion design.</i>
Tasks of the study programme	<ol style="list-style-type: none"> <li><i>1. To theoretically and practically prepare textile and leather product designers, specializing in clothing design in accordance with the standard of the textile and leather product designer profession, developing students' skills, attitudes, professional knowledge and competencies for work in the textile industry;</i></li> <li><i>2. To ensure the fulfilment of the requirements of the first level professional higher education standard for obtaining the qualification of a designer of textiles and leather products.</i></li> <li><i>3. To promote the development of students' general skills and competencies, including communication, presentations, ability to work in a team, social dialogue, leadership, etc.</i></li> <li><i>4. To develop students' skills to apply the scientific approach to solving problems and to carry out research activities, to develop creative work skills and abilities;</i></li> <li><i>5. To ensure the improvement of the content of the study program and the study process in accordance with the changes in the requirements of labour market.</i></li> <li><i>6. To prepare the holders of professional qualifications for studies at the bachelor's level, to promote students' self-education by improving their knowledge in the field and in the field of professional activity.</i></li> </ol>

Results of the study programme	<p><i>K1 Is able to demonstrate the general and professional knowledge of facts, theories, regularities and technologies required for the profession of textile and leather products designer (specialization clothing designer) at the level of idea, understanding and use;</i></p> <p><i>K2 Is able to demonstrate the understanding of the most important concepts of the textile industry and related industries, the regularity of the design and production process and current events in various professional situations and environments, taking into account the development trends of technology and materials.</i></p> <p><i>S1 Based on an analytical approach and using the acquired theoretical foundations of the field, a student is able to work in cooperation with others, plan, organize and perform practical tasks, professional activities at the level of professional competence corresponding to the qualification of a clothing designer.</i></p> <p><i>S2 Is able to apply creative, practical, innovative approaches to clothing design, plan, perform or supervise such work activities, designing conceptual models of new products, in various professional, non-standard situations and environments where unpredictable changes may appear.</i></p> <p><i>S3 Is able to evaluate and improve one's own and other people's activities, show a professional approach and problem-solving skills that allow to find creative solutions to professional tasks in order to perform research or design activities and qualified professional functions.</i></p> <p><i>S4 Is able to formulate, provide arguments and discuss about the practical issues of the industry, research results, discuss at various levels with colleagues, clients and management board, solving tasks in the field of clothing design.</i></p> <p><i>S5 Is able to critically evaluate his/ her level of knowledge and skills in the field of clothing design and the need to improve it, continues his/ her further education, independently improves his/ her professional qualification, competencies in accordance with innovations in the textile industry and related areas.</i></p> <p><i>C1 Is able to independently obtain, select, process, evaluate, systematize, use information in the field or profession related to the design and production of textiles, use it in decision-making process, in the operation of a textile manufacturing company, and in solving different industry-related problems.</i></p> <p><i>C2 Is able to formulate, analytically describe, analyze and solve practical problems, professional tasks in the clothing design and production process, take responsibility and show initiative, working individually or in a team, delegating tasks, working in a team of company professionals, leading and managing the work of other professionals.</i></p> <p><i>C3 Is able to evaluate the impact of professional activity in a wider social context, namely, the environment and society, to show an understanding of professional ethics in the clothing designer profession and to participate in the development of the relevant field of the textile industry.</i></p> <p><i>C4 Is able to observe safe work environment measures, basic principles of professional activity and communication in the work environment, apply normative documents corresponding to a certain situation, use digital tools, business principles, prepare and present presentations, promote process systematization, optimization and digitization.</i></p>
Final examination upon the completion of the study programme	Qualification paper

# Study programme forms

## Full time studies - 2 years, 6 months - latvian

Study type and form	<i>Full time studies</i>
Duration in full years	2
Duration in month	6
Language	<i>latvian</i>
Amount (CP)	100
Admission requirements (in English)	<i>Vidējā izglītība.</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>Textiles and Leather Products Designer</i>

## Places of implementation

Place name	City	Address
Rēzekne Academy of Technologies	RĒZEKNE	ATBRĪVOŠANAS ALEJA 115, RĒZEKNE, LV-4601

## Part time extramural studies - 3 years - latvian

Study type and form	<i>Part time extramural studies</i>
Duration in full years	3
Duration in month	0
Language	<i>latvian</i>
Amount (CP)	100
Admission requirements (in English)	<i>Secondary education</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>Textiles and Leather Products Designer</i>

## Places of implementation

Place name	City	Address
Rēzekne Academy of Technologies	RĒZEKNE	ATBRĪVOŠANAS ALEJA 115, 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.**

In 2021, the Director of the RTA study program “Fashion design and technology” participated as an expert of the working group of the Council of Experts on Textiles, Clothing, Leather and Leather Products in the development of the professional standard “Designer of Textiles and Leather Products”. At the meeting of the Tripartite Cooperation Sub-Council for Vocational Education and Employment on 11 August 2021 (Protocol No. 5), a new professional standard for the designer of textiles and leather products was approved <https://registri.visc.gov.lv/profizglitiba/dokumenti/standarti/2017/PS-164.pdf> (Latvian only)

Managers or leading specialists of several large companies were involved in this process. The previous standard of the profession was radically revised. The new standard incorporates updated requirements for the professional qualification of a textiles and leather products designer. According to the updates, during 2021 the RTA study program “Fashion design and technology” was revised, including the latest requirements of the industry. Thus, when preparing the accreditation materials, the recommendations of the study program accreditation commission experts were taken into account and the study program was revised according to the new professional standard requirements (see Appendices 5, 6), i.e., the aim, tasks and study results of the program were specified in accordance with the new professional standard.

Since the accreditation of the study field (hereinafter SF) in the academic year 2012/2013 (19/06/2013 No. 178) changes have been made in the study program (hereinafter SP). The part of general education study courses includes study courses “Starting a Business”, “Environmental and Civil Protection” in accordance with the requirements and regulations of the Environmental Protection Law and the Civil Protection and Disaster Management Law on the 1<sup>st</sup> level professional higher education state standard: Regulation No. 141 “Regulations on the State Standard for First-Level Professional Higher Education”. The study courses in the part of the professional specialization of the field includes new study courses “Basics of planning industrial production collections” (in accordance with the recommendation of practice supervisors and employers), “Basics of production economics” (based on the professional standard). The results to be achieved by the study courses and practice tasks in accordance with the updated professional standard have been specified. Several professional specializations are not planned, while the amount of CP of study courses of the specific profession is reviewed and supplemented. As the professional standard has changed, the aim, tasks and results of the program have been clarified in accordance with the new professional standard. Other program parameters have not been changed.

**3.1.2. Analysis and assessment of the study programme compliance with the study field. Analysis of the interrelation between the code of the study programme, the degree, professional qualification/professional qualification requirements or the degree and professional qualification to be acquired, the aims, objectives, learning outcomes, and the**

**admission requirements. Description of the duration and scope of the implementation of the study programme (including different options of the study programme implementation) and evaluation of its usefulness.**

The name of the SP is formed in accordance with the thematic group “Engineering, manufacturing and construction” of the Education and Training Sector Classification (ISCED-F 2013), which belongs to the thematic area “Production and processing”, which belongs to the thematic area “Production and processing”, which in turn belongs to the group of educational programs “Textile production technologies and production of products”.

The title, aim, tasks, professional qualification and study results of the SP “Fashion Design and Technology” are interrelated and defined in accordance with:

1. A framework for national classifications in line with the European Qualifications Framework. The SP corresponds to LQF level 5, therefore study results are defined in accordance with the descriptions of knowledge, skills and competences corresponding to level 5, provided by the Cabinet Regulation No. 332 “Regulations on the Classification of Education in Latvia” of 13/06/2017.
2. Requirements of the fourth professional qualification level professional standard Designer of Textiles and Leather Products (specialization Fashion Designer), following that the content of the SP corresponding to the professional standard correlates with the goals, tasks and study results defined by the SP (see Annex 4).
3. In accordance with the balance of general education study courses, branch (field of professional activity) theoretical basic courses and specific professional specialization courses (compliance with the state education standard, see Annex 3), which is provided by the Cabinet Regulation No. 141 “Regulations on the first level professional higher education state standard”.

The title of the SP “Fashion Design and Technology” is determined in accordance with the educational classification procedure in Latvia and the recommendations expressed in the previous accreditation, showing the connection with the SF. The aim of the SP is to ensure the acquisition of the 4<sup>th</sup> qualification level (5<sup>th</sup> LQF level) professional higher education in the design of textiles and leather products, specializing in fashion design, in accordance with the requirements of the labor market (Textile and leather products designer profession standard) and the requirements of the first level professional higher education (educational standard) in designing, to prepare students for work in the textile industry, observing the unity of theory and practice, thus ensuring the competitiveness of graduates in the Latvian and international labor market.

<https://likumi.lv/ta/id/6397-noteikumi-par-pirma-limena-profesionalas-augstakas-izglitibas-valsts-standardu> (Latvian only)

<https://registri.visc.gov.lv/profizglitiba/dokumenti/standarti/2017/PS-164.pdf> (Latvian only)

The tasks set for the implementation of the aim envisage ensuring the compliance of the educational program with the regulation of studies and science in the Republic of Latvia.

The synergy of theory and practice in the field of textile and leather product design, specializing in clothing design, is also the focus of SP study results, which plan not only the acquisition of specific knowledge, but also the development of certain skills and competencies. In order to effectively achieve the results of the SP, RTA applies a study process based on a student-centered approach, which envisages the development of students' independence, entrepreneurship and initiative. An

essential precondition for successful achievement of study results is the contingent of enrolled students.

Admission to SP takes place on the basis of the requirements of the Law on Higher Education Institutions of the Republic of Latvia, the regulations of the Cabinet of Ministers on the requirements, criteria and procedures for admission to SP and RTA admission regulations. SP applicants are admitted on the basis of 3 centralized state examinations: in mathematics, Latvian and a foreign language (one foreign language, including English, German or Russian, according to the applicant's choice).

Additional points in the admission requirements are applied to the winners of the competitions, graduates of the Eastern Latvian Secondary School of Technology and holders of the Junior Achievement Latvia certificate.

Coefficient of the competition applicants for admission to the SP "Fashion Design and Technology" 2014/2015 - 4,4; 2015/2016 - 3,6; 2016/2017- 3,4; 2017/2018 - 2,2; 2018/2019 - 2,4; 2019/2020 - 3,0; 2020/2021-2,4; 2021/2022- 2.9 applicants per one budget study place, which is sufficiently stable in the whole period among the admission indicators of the RTA, it shows that students purposefully choose this SP and it is specific and required SP at the RTA, as well as very necessary in Latgale region as a whole, because **it is the only** such professional qualification level program not only in Latgale, but also in Latvia as a whole.

When evaluating the previous education competence of matriculated students, it should be noted that the average certificate / diploma mark in 2020, rounded off, was 6.5 points (almost good / good), but for 2021 applicants - 8 points (very good). The statistical data of the last two years show the trend of the whole period - the vast majority of applicants have mastered the previous education programs well and are sufficiently prepared for studies in the first level professional higher education program.

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

The SP "Fashion Design and Technology" has been implemented at the RTA since the academic year 2012/2013. Its establishment was determined by the goal defined in the strategy of Rēzekne Higher Education Institution (now the RTA) to strengthen the strategic role of the RTA in Latgale region, Latvian and European higher education and research institutions, positioning itself as a technology academy, focusing on development, acquisition, research, popularization and application of multidisciplinary technological solutions, emphasizing the important role of interdisciplinary links in the development of higher education and science in Latvia, primarily reducing the factors hindering the development of Latgale region, guaranteeing the development and practical implementation of innovative products necessary for traditional economic sectors, creative and cultural industries. The SP was developed on behalf of Latgale region textile industry clothing companies to provide specialists in clothing and other sewing products (fashion designers, constructors, etc.) for the needs of the region. The demand for specialists in the field has not decreased even now.

The location of higher education institutions (HEIs) in the regions has been recognized as an important regional policy tool in Europe and the world, with particular emphasis on the positive impact of HEIs on demographic, economic, infrastructure, cultural, educational, social and other

processes.<sup>1</sup> Recent EC reports and strategy documents have also emphasized the key role of HEIs as centers of regional development and innovation,<sup>2</sup> which on the Latvian scale is especially important in promoting the economic development of Latgale region. According to OECD data<sup>3</sup>, Latgale region has the lowest economic stability indicators in Latvia. Data from the Central Statistical Bureau of Latvia also show that Latgale region lags significantly behind other regions of Latvia in terms of GDP per capita.<sup>4</sup>

In such circumstances, it is especially important to train specialists of the appropriate level in the manufacturing industry (textile), who can become specialists in the organization of production / processing processes, entrepreneurs and / or middle managers in the manufacturing (light) industry, actively participating in business development and creating new working places.

One of the goals of the operational program "Latgale ID" is study programs based on the needs of companies in higher education institutions and vocational education institutions. "Latgale ID" sub-program: sectoral program that correspond to the Latgale strategy directions "Skills" and "Efficient companies" and are aimed at increasing income in the region. The program corresponds to the LIAS 2030 priority "Innovative and eco-efficient economy". To achieve the goal, support for higher education institutions and vocational education and lifelong learning institutions in the training of young specialists is established as an action measure.

According to AIC data<sup>1</sup>, in total, SF-compliant SPs in Latvia are implemented by five higher education institutions (Latvia University of Life Sciences and Technologies, Vocational Education Competence Center "Rīga Technical College", Rīga Technical University, RTU Technology College of Olaine and Rēzekne Academy of Technologies). The RTA is the only mentioned educational institution in the **region** (Latgale).

[1] AIC. Akreditētie studiju virzieni un programmas.

<https://eplatforma.aika.lv/index.php?r=site%2Fstudy-direction%2Flist>

Of all the mentioned higher education institutions, the first level professional higher education SP, which complies with the professional standard "Textile and Leather Product Designer", specialization Fashion Designer, **implements only RTA**, this fact justifies **the special significance and, to some extent, uniqueness of Latvia**. Other mentioned educational institutions carry out either professional bachelor's level studies in the relevant field or first level vocational education studies in other fields corresponding to SF.

When developing SPs, they were compared with SPs corresponding to the EQF level in Latvia. The RTA **is the only educational institution in the country** that prepares 5 LQF specialists in this field for companies in the light industry / textile industry. The industry's demand and support for the training of 5<sup>th</sup> LQF level specialists in the design of textiles and leather products is expressed by including this profession in the qualification structure of the textile, clothing, leather and leather products industry.

RTA SP provides succession of education to specialists who have acquired secondary professional education (Costume Style and Manufacturing Specialist, Fashion Design Specialist) in the region, Latvia. After graduating from the program, it is possible to continue studies in the later stages of studies to obtain a 5<sup>th</sup> level professional qualification. The SP is designed to provide locally rooted and globally competent studies, to provide an opportunity to obtain a professional qualification in the design of textiles and leather products, specializing in fashion design. The program implemented by the RTA can be studied in Latvian.

[2] Tertiary education. Statistics.

[https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Tertiary\\_education\\_statistics&oldid=507549#Participation\\_by\\_level](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Tertiary_education_statistics&oldid=507549#Participation_by_level)

RTA annually analyzes the data of the State Employment Agency on RTA graduates who are registered as unemployed.

In order to obtain data on the employment of graduates, a survey of graduates is conducted, in which the field of professional activity is indicated. According to the information received in 2021, graduates of the corresponding SP of the study field have not been registered in the list of the unemployed from 2015 to 2021. Evaluating the employment situation, it was established that out of 20 SP graduates: 2 graduates continue their studies in another SP, 4 - work in another field, 2- work in another design field, 6 - work in newly established companies in the sector or work in Rēzekne business incubator in the pre-incubation period, 4 - work in medium-sized companies in Latgale.

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

In the academic year 2021/2022 21 student is studying full-time in the SP „Fashion Design and Technology” (for statistical data on students in the reporting period see Appendix 2).

During the reporting period, the number of SP students does not change significantly. Since the academic year 2014/2015 two trends in the choice of SP have been observed:

- The program is chosen by working people, such as those who are self-employed in the sector or related sectors;
- the program is already chosen by those who have obtained a professional bachelor's degree in other fields, such as economics, in order to start a business in this field after obtaining the professional qualification of a product (fashion) designer.

SP full-time studies are characterized by a drop in the number of students in both the first and the third year. The main reasons for students' exmatriculation are failure, non-compliance with the requirements set in the study process (for example, they do not start studies at all, etc.) or they just do not want to study. For most students who have been expelled due to failure, their abilities are adequate for successful completion of the SP; many of them are working and are unable to combine work with the study process, often they have work in another city, because the region (city) has difficulty finding work. The current workload does not allow a full focus on studies. Consequently, students do not meet the requirements set in the study process. Many of the students find a job in Rīga, the workload is high, as a result students do not return from academic leave (reasons - becoming parents, change of residence, etc.). A large proportion of students who have been expelled for failure have completed almost all study courses but have not developed and defended their qualification paper. Such students resume their studies after first or a few years and complete the SP.

Evaluating the admission results, in the academic year 2022/2023 it is planned to admit students to part-time studies as well, as employed students are unfortunately not always able to successfully combine work with full-time studies.

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

Not applicable.

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

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

SP „Fashion Design and Technology” scope – 100 CP, including:

1. Comprehensive study courses - 20 CP (20%);
2. Compulsory courses of the branch (professional field of activity) - 20 CP (20%);
3. Branch-related (professional activity) specific profession courses - 56 CP (56%) (including professional internship - 16 CP (16%) and qualification paper - 8 CP (8%);
4. Elective courses - 4 CP (4%).

(See SP plan in Annex 6).

The labor market needs of the manufacturing (light / textile) sector and the trends of the textile and clothing technology sub-sector of the materials science sector were taken into account in the development of the SP. In order to ensure the topicality of the SP in the labour market, the RTA has established a procedure for regular evaluation and specification of the study content, involving the representatives of the employers in the field in the implementation of the SP:

- in accordance with the study plan, teaching staff with professional experience in accordance with the SP profile is involved, students in the study courses receive the latest experience and information relevant to the labour market;
- participation in the final examination commissions in accordance with the RTA [Regulations for the state and final examinations](#), discussing the study results (hereinafter SR) and listening to proposals for the improvement of the study content and research topics;
- participation in the SF expert council, discussing SP SR, recommending proposals for improving the content and implementation of studies.

The evaluation of the topicality of the content of the study courses, compliance with the needs of the branch and the labor market is a mandatory study quality measure at RTA, it is performed in several stages coordinated with the study schedule:

- **in the process of development, coordination and approval of annual study plans**, study course programs are reviewed, the offer of used literature is updated, the coordination with SP SR is updated. In order to control the correlation between the study course and the SP SR, in the SP form approved by the RTA, each lecturer defines the SR of his / her study course, coordinating it with the SP for the implementation of which the study course and study results are intended;
- **in the process of developing annual SF and SP self-assessment reports**, based on feedback from surveys of students, employers and graduates;
- discussing the requirements for the development of SP content, SP and study courses SR, research papers in the **SF Council and in the general meetings of SF lecturers**;
- discussing the content of the SP, the study results of the SP and the study course in the study field **expert council**;
- in the process of defending qualification papers.

The evaluation of SP research development trends appears in the study research papers and study courses, mainly, "Introduction to Research" and "Study Project". Students' research activity is activated in the study project and qualification paper: they have a theoretical-practical, applied orientation, the aim is to strengthen the student's knowledge and skills acquired in the respective academic year (according to the study plan in the 2<sup>nd</sup> year), promoting the development and strengthening of the student's research skills, problem-solving, analytical and design skills, as well as practical product design experience.

In the qualification work, its author provides independently developed findings, conclusions, proposals for the solution of a problem / user need, proves his readiness to work in the industry. Students choose project topics by linking the SR achieved in the study courses, the SR proposed for research and the current needs of the industry, user and materials and technologies. ensure the quality of research work, students use literature in a foreign language, the study course "Introduction to Research" is also taught bilingually, i.e., in Latvian and English.

In order to ensure the compliance of the content of SP with the development tendencies of the industry, the following several measures are taken during the study process:

- **descriptions of study courses are regularly updated**, their content, if necessary, purchasing the latest literature to be used in the study process;
- **lecturers carry out scientific research** in the fields or interdisciplinary sciences related to the content of study courses, students develop study research papers (12 CP from the SP content are devoted to direct development of research competence), RTA has strict requirements for using the latest scientific literature in study research development. It allows you to identify the latest research in the industry and evaluate the innovation of your research ideas.
- **students have the opportunity to publish scientific research** and report on scientific and practical research at the annual international scientific and practical conferences of RTA students and lecturers.
- **SF teaching staff is involved in the implementation of international cooperation projects in related fields** (see Annex 22), which ensures the implementation of the latest achievements in the field in the study process.

The expected SR of the study course are developed in accordance with the goals and tasks of the SP and the goals and achievable results are formulated in the SP, from which the goals and SR of each study course are derived, i.e., what the student is able to do by mastering the SP as a whole

and what the student is able to do by acquiring a separate study course. The SR of the study course are related to the basic tasks of professional activity specified in the professional standard, the skills, knowledge and competencies necessary for the performance of basic professional activity duties, which are justified by the changing environment of the modern labour market (see Annex 7 for descriptions of SP study courses).

See the mapping of study courses for achieving SP SR in Annex 5.

The structure of study course programs is regulated by RTA "[Provisions on the description of a study course/ module development at Rezekne Academy of Technologies.](#)" approved by the Study Council.

In order to ensure the connection of the content of study courses, the achievable SR with the goals of the SP and the results to be achieved:

- **the lecturer plans the results of the study course in accordance with specific SP results**, which are reflected in the form of the study course program; if the study course is taught by several lecturers, they shall agree on the study results of the study course and the procedure for their evaluation;
- the lecturer **coordinates** the SR defined in the study course **with the SP director**, who is responsible for determining the SP SR;
- all **study course programs are approved at the meeting of the SF Council**, pre-evaluating whether the content of the study course does not overlap, whether it is in accordance with the content of programs corresponding to EQF level 5, whether the student's independent work is reasonably included and the latest literature of the field (incl. in English) is included, whether the planned examination forms are able to fully assess the competencies acquired by the student, etc. issues;
- in order to control the planning of SR of study courses, the director of the SP conducts a mapping of study courses, which allows to verify and, if necessary, adjust the content of study courses to ensure the fulfilment of the objectives and results of the SP.

Evaluating the correlation between the SP and the SR of the study courses, it is considered that the SR defined in the study courses ensure the fulfilment of the SP SR, allow to achieve the goal of the SP and fulfil the tasks. In its turn, the SR assessment conditions defined in the study courses and SP allow to determine the level of SR performance at the level of knowledge, skills and competencies. The objectives of the SP, the results to be achieved and the study results and content of the study courses agreed with them fully meet the needs of the light / textile industry, the requirements of the labor market and scientific trends.

**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.**

In the study course programs, in accordance with the specifics of the study course, lectures, practical classes (practical and laboratory works) and students' independent work are provided for the acquisition of the study content. 40 hours are provided for the acquisition of 1 credit point (1 CP = 1.5 ECTS) of the study course, including 16 contact hours (lectures, practical and laboratory works) in the auditorium / laboratory / computer room / workshop and 24 hours - for independent work at home / library / laboratories / computer rooms / workshops. The proportion between the lectures and the hours devoted to practical classes or laboratory work is determined by the lecturer of the specific study course. In most study courses this proportion is as follows: lectures - 50%, practical and laboratory works - 50% of the number of contact hours. Contact hours are organized taking into account that students have different experiences and previous knowledge. Acquisition of new knowledge, in addition to the presentation of industry news in the form of a lecture, is based on the ability to integrate knowledge from different fields, to contribute to the creation of in-depth or expanded knowledge, research or professional development methods, depending on the specifics of the course. During the lectures, students are asked questions and discussions are encouraged. During the practical classes, students analyze on the basis of practical examples, develop design projects, make calculations and draw conclusions based on the theoretical knowledge acquired in the study courses. Students, in accordance with the study course program, develop practical works, presentations, perform tests, as well as independently acquire certain issues of the study course.

The program also includes study courses in which 80-90% of the number of contact hours is allocated for practical work; classes in these courses take place in the workshops and laboratories of the Faculty of Engineering; they are basically professional specialization courses, in which it is important to acquire the skills necessary for the future profession, for example, Graphic programs IT, Professional practicum. The types of students' independent work are defined in the description of the specific study course. The student receives assignments for independent work during the lectures. The laboratories and workshops of the Faculty of Engineering are freely available to students for independent work 7 days a week. In order to ensure the individual learning needs of students, an important role in the study process is given to individual consultations (20 hours per semester), the schedules of lecturers' consultations are publicly announced on the RTA website and in an accessible way at the faculty. Communication between students and lecturers also takes place by phone, with the help of *e-mail*, *Skype and Whatsapp*, [e-course website](#) (Latvian only), *Teams* and *Zoom* communication platforms.

At the end of each study course and in the process of its acquisition, the lecturer analyzes the study results, student surveys are conducted. The results are discussed at the meetings of the SF Council and at the general meetings of SF lecturers. If necessary, adjustments are made to the study results of individual study courses.

The principles of student-centered education in the study program and individual approach to students are provided in the following way:

- by evaluating the previous preparation of students and offering such study content that is most able to ensure the achievement of SP study results;
- RTA offers a flexible approach to the study process, including taking into account the employment of students during studies, planning lectures at a time convenient for students;
- students are provided with full consultative support and full access to the study resources necessary to achieve the study results (including remotely available);
- preparing handout study materials (during lectures) and study course materials are available on the [e-course website \(Latvian only\)](#);
- students' studies and research activities are focused on the growth of their personality, including the development of their personality and motivating for further studies to obtain the 5<sup>th</sup> level of professional qualification;
- students are provided with feedback on the assessment of study results, which allows them to independently plan the course of studies and the best ways to achieve study results;
- in case the student has not been able to attend the exam session due to justified reasons, the lecturer agrees with the student on individual consultations;
- in the organization of research work (selection of study project and qualification paper topics) the sphere of students' interests (previously gained experience in the development of research work), specifics of practical work and experience are respected;
- in the organization of research work (study project and qualification paper management) the wishes of students in the choice of the supervisor are taken into account, promoting interpersonal communication and as a result increasing the quality of research work;
- lecturers are available for students in accordance with appointment schedule, as well as by individually arranging a consultation;
- information about changes in the study process, corrections of practical work and other information is mainly sent to students by e-mail. For this purpose, a unified e-mail has been created for RTA students at [name.surname@edu.rta.lv](mailto:name.surname@edu.rta.lv) , which is given to all matriculated students.

To achieve the study results, the RTA library is available, computer classes are available in the academy, and Wi-Fi wireless internet is freely available. Starting the implementation of SP in full-time studies will encourage those who have acquired the first level professional higher education to continue their studies and obtain the second level professional higher education, thus also to increase the level of their professional education and competitiveness in the labour market.

RTA implements a problem-based learning approach (PBL), purposefully balancing the acquisition of theory in the content of the study course with the solution of practical tasks relevant to the industry and its companies. Custom research and design production is carried out. Two SP study courses involved in the SP use the “problem-based learning” method - PBL method, i.e., the study courses “Apparel Design II” (3CP) (2019/2020) and “Practicum in Fashion Design II” (2CP) . During the academic year 2022/2023 it is planned to master this method in the study course “Design of Leather Products” in the amount of 2 CP. PBL contains the acquisition of new knowledge, intensive (including interdisciplinary) group cooperation and communication with various parties involved in solving the problem. PBL allows students to develop competencies such as innovative thinking, self-assessment, the ability to work with information, independent learning in a team environment. The PBL method used in the study courses of the field and the structure of the content and work organization of the corresponding study courses are able to promote and ensure the implementation of the SP study results. At the end of each study course and in the process of its acquisition, the lecturer analyzes the study results, student surveys are conducted. The results are discussed at the meetings of the SF Council and at the general meetings of SF lecturers. If necessary, adjustments are made to the study results to be achieved for individual study courses.

**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 procedure for organizing the internship at the RTA is regulated by the “Regulations on internships at the RTA” approved by the Senate. ["Regulations on internships RTA"](#) (Latvian only). The Regulations define the types, goals and tasks of the internship, organizational issues, the procedure for defending the internship at the RTA, and the methodological instructions for the internship approved by the SF SP (see Annex 8).

In order to gain practical experience and improve skills, professional internship outside the educational institution for SP students is provided in the amount of 16 CP = 24 ECTS (16 working weeks), which is in accordance with the Cabinet Regulations No. 512 ["Regulations on the State Standard for First-Level Professional Higher Education"](#) (Latvian only), in accordance with the purpose and tasks of the SP, the requirements specified in the professional standard (see Annex 4), the professional internship program is coordinated with the results of the SP.

In RTA professional programs, the amount, duration and time of the internship are determined in the SP plans and internship methodological instructions. For an overview of the SF SP internship see table 3.2.4.1.

3.2.4.1.Table

Internship in the first level professional SP

Program	Type of internship	Volume	Total volume of internship in the program
Fashion design and technology	Industrial (manufacturing)	12 CP	16 CP
	Qualification (pre-diploma)	4 CP	

The internship is implemented in accordance with the internship agreement on the provision of the internship place or in accordance with the decision of the RTA Study Council on the provision of the internship place in the academy itself. Professional internship is focused on the fulfilment of the study results specified by the SP. It is based on the use of the acquired knowledge and previous experience and the acquisition of practical skills in manufacturing companies - internships. Its aim is to strengthen and supplement students' theoretical knowledge, improve professional skills and abilities, develop professional competencies in accordance with the requirements of the profession

of textile and leather designer, specialty fashion designer, and / or provide opportunities to plan and conduct applied research in the field, provide opportunities to develop skills and abilities to conduct applied research in the relevant field of the light / textile industry. Students can carry out at least part of their professional internship at the RTA Physical Processes and Laser Technology Research Center, conducting research on laser processing (marking, engraving, cutting) of textiles and in the laboratories of the Research Center on Metalworking and Mechatronics, performing 3D printing research on textiles.

In order to achieve the set goal, the main **tasks** of the internship are defined: 1) to get acquainted with the assortment of clothing to be designed / manufactured, work performance technologies, raw materials, equipment, means of production; (coordinate with the company's management / internship supervisor); 2) to get acquainted with, understand the technological process of production of products manufactured in the company, its stages (resource planning, design / production organization, etc.) and to be able to evaluate the significance of measures in ensuring product quality; 3) to acquire practical skills in the design of clothing and to analyze the constructive and technological tasks necessary for the provision of the production process, the principles of operation of equipment; 4) to evaluate the peculiarities of the constructive and technological processing of model production, to analyze the substantiation, choice and topicality of the used technologies; 5) to get acquainted with the principles of quality assurance in the enterprise, the procedures for their development, implementation and supervision; 6) to master the process of development / design of new products / projects in clothing manufacturing companies, working in a team; 7) to study, analyze and summarize the raw materials and fittings used in the place of internship, to analyze their properties; 8) to analyze product design solutions and manufacturing possibilities (choice of materials and conformity to the model, constructive design and technological processing possibilities);

The methodological instructions contain the goals of the internship, tasks, processes, a description of the duties to be performed in the company, requirements for drawing up the internship report (see Annex 8).

The provision of the SP internship place is at the student's choice, i.e., the student chooses the internship place according to the tasks of the professional internship or the internship place coincides with the workplace. Students also choose a internship place as a potential job. RTA has established long-term and successful cooperation with employers. In order to facilitate the fulfilment of internship tasks for students, basic internship agreements have been concluded, mainly with local companies of Latgale region, branches of foreign companies, private companies (Rēzekne, Daugavpils, Krāslava, Preiļi, Jēkabpils region, etc.). In connection with the study content, it is possible to complete the internship program in the offered internship places (see Annex 14, Section 2.5.1 of Paragraph 2 of the Self-Assessment Report "Description of the Study Field"). By coordinating the internship tasks with the SP directors, company managers offer students both internship place and jobs.

For the planning and successful implementation of the SP internship, a tripartite short-term internship agreement is concluded between the RTA, the employer at the internship place and the student, specifying the internship goals, tasks, deadlines, as well as the internship supervisors (at the internship company and the RTA SP).

In the "Professional internship" (12 CP) stage, the recommended venue is a company in the manufacturing sector, in the "Qualification internship" (4 CP) stage, the venue is related to the chosen qualification topic and the corresponding company, which may be a manufacturing plant or a private sector company. Students are given the opportunity to choose the place of internship according to their professional interests and the topic of the qualification paper. In case the student

has not found a internship place independently, a internship place is offered at one of the companies with which RTA has concluded an agreement on the provision of internship for students.

Before starting the internship, the student coordinates the tasks to be performed with the internship supervisor. RTA provides full internship documentation (methodological instructions, diary) to support the student. The internship supervisor from the RTA helps the student to formulate individual tasks, coordinates the topic of the qualification paper and individual tasks in specific issues, consults students during the internship, provides methodological recommendations for filling in the diary and internship reports. During the internship, students have access to consultations with lecturers on the issues of internship implementation.

After the internship, the student submits a internship report and a diary, which reflects the course of the internship, the fulfilment of the practice tasks, their reflexive assessment by the student and by the internship supervisor in the company. In the end, in accordance with the requirements of the cooperation agreement, the defense of the internship is organized in the jointly established internship defense commission, where each student provides an overview of the work done during the internship, and is evaluated.

During the internship students strengthen the theoretical knowledge and professional skills acquired in the study courses, acquire and improve professional skills, as well as obtain the necessary factual material for the development and defense of the qualification paper.

Professional internship tasks are linked to the SP tasks. Students, using the acquired theoretical knowledge and skills, in internship perform professional activities within the professional competence of a fashion designer, in the internship report formulate and analytically describe information, problems and provide their solutions in the textile industry; explains problems and their solutions in the defense of professional internship, argues about them with specialists, makes decisions and shows creative solutions in changing or unclear circumstances, as well as independently obtains, selects and analyzes information and its use for decision-making within its competence.

Professional internship is an essential part of the SP, which ensures the fulfilment of the study results, goals and tasks set by the SP, is aimed at the development of a qualification paper and certification of the competence of a textile and leather product designer specializing in fashion design.

### **3.2.5. Evaluation and description of the promotion opportunities and the promotion process provided to the students of the doctoral study programme (if applicable).**

Not applicable.

### **3.2.6. Analysis and assessment of the topics of the final theses of the students, their relevance in the respective field, including the labour market, and the marks of the final theses.**

At the end of the SP, qualification papers are developed on the basis of the Methodological

Guidelines for the Development and Defense of Study Research Papers, RTA Common Methodological Guidelines for the Development and Design of Qualification Papers and the 1st Level Professional Higher Education SP "Clothing Design and Technology" available at RTA DVS, division "Studentiem". "Methodological recommendations for study papers, diploma papers, bachelor's papers and master's papers" developed by IF lecturers are available for students on the e-course website ([www.e-kursi.rta.lv](http://www.e-kursi.rta.lv)).

The tasks of the qualification paper, in accordance with the methodological regulations, are prepared by the supervisor of the qualification paper and approved by the meeting of the council of the SF "Production and processing". The student chooses the topic of the qualification paper on the basis of the research / professional interest gained in the study courses, continuing the research of the initiated topic in the study project and linking professional practice places or workplace interests in the textile industry, fashion design / production. For working students, the choice of topic is often determined by the specifics and experience of the practical work.

The qualification paper contains 1) a theoretical part, which summarizes the substantiation of the topic and research materials; justification of the model / collection design project solution: situation, market analysis, design concept, analogue research, development of compositions and sketches, specifications of material selection justification, test result tables); part of the constructive and technological design of the model with the technical drawing and description of the model to be designed, the choice of the basic structure and development of the model structure, plan preparation, layout design, technical specifications, as well as product technological design (equipment selection, technological sequence, quality control); the economic justification of the project developed. A graphic part is enclosed to the qualification paper - visualization of the project and part of the practical realization of the product design: preliminary samples / designs of the model.

During the reporting period, students who obtained the professional qualification of a designer of working textiles and leather products (clothing) analyzed and evaluated current problems in clothing manufacturing companies, developing improved, innovative solutions in product design, or developing new product design solutions for a specific customer. Evaluating the topics of the qualification papers, it can be concluded that companies from various fields are represented, which is related to the sphere of students' interests and the specifics of practical work in the chosen place of practice. Therefore, the assortment of the studied products is different, those are clothes, outerwear, women's and men's light clothing, children's clothing, functional and fashion clothing. Current issues of structural, decorative or functional processing of products are addressed. There is a positive tendency to use modern advanced technologies (laser processing of textile fabrics - marking, cutting; 3D printing) in the designed clothing, thus improving the production technology or saving resources.

The overall evaluation of the qualification paper consists of the following criteria: the correspondence of the content of the paper to the chosen topic, as well as the novelty of the topic; fulfillment of the set goal and tasks of the paper; theoretical guidelines of the topic; product design project functionality and user compliance, aesthetics, quality of technical solution, complexity, economic justification, as well as the ability to draw reasonable conclusions; ability to put forward concrete, feasible and justified proposals; the logic of the project structure and development; language culture; technical design of the work; the materials used in the research and the results of their processing; public speaking skills; ability to defend one's conclusions and proposals; the ability to respond to critical remarks and the ability to defend one's point of view. The average evaluation of qualification papers by academic years is high enough: in the academic year 2014/2015 - 8 points; in the academic year 2015/2016 - 9 points; in the academic year 2016/2017 - 9 points; in the academic year 2017/2018 - 9 points, in the academic year 2018/2019 - 10 points; in the

academic year 2019/2020 - 9 points, which indicate that high-quality projects and designs have been developed, indicate successful study results and their successful presentation.

The geography of light / textile companies in the qualification practice of the SP students confirms the topicality of the SP in the labor market of the sector in Latgale, because the final works, design projects developed by students are in the vast majority (90%) related to Latgale companies, which are closer to home or closer to professional activity places, these are both larger clothing manufacturing companies, such as SIA Nemo, SIA Spectre Latvija (Rēzekne branch), smaller companies, such as SIA EcoEmi, SIA Quilt Art, and new companies founded by students in Latgale, such as Bencha Muude, ZKraft, SkaistumsS, etc.

In the process of elaboration of the qualification paper, the wishes of the students in the choice of the scientific supervisor are taken into account, promoting interpersonal communication and as a result increasing the quality of the research work. The process of developing a qualification paper is controlled throughout the semester; the student have to regularly report on the work done to his / her supervisor (at least once in 2 weeks), in accordance with the schedule for the development of the qualification paper. Before defending the qualification paper, the pre-defense of the qualification paper is organized by the SF, during which the teaching staff and students of the study field discuss the methodology, structure and content chosen in the qualification paper, literature, and the innovative capacity of the research. The qualification is checked before the defense in the Unified Latvian Anti-Plagiarism System. The SF Council is expected to analyze each case of coincidence. No such cases were detected during the period considered. The defense of the qualification thesis at the RTA takes place in the form of an open session, where the State Qualification Examination Committee and each attendee can ask students questions, there is a discussion with specialists about the problems and their solutions in the field of fashion design. The chairman of the examination committee and at least half of the members of the state qualification examination committee are representatives of professional organizations or employers, after the work of the committee discussions are held on the issues of qualification paper, and in the following years the recommendations of employers' representatives are taken into account.

The work of the State Qualification Examination Committee and the awarding of professional qualifications take place in accordance with the "Regulations on State and Final Examinations at the Rēzekne Academy of Technologies (RTA)" <https://ieej.lv/limQj> . Industry professionals (production consultant and graduate engineer-technologist of SIA "ATJ Production"; production manager of Rēzekne branch of SIA "Spectre Latvija"; member of the board of SIA "Quilt Art", product designer) and two representatives of the RTA academic staff participate in the SP State Qualification Examination Committee, as well as members of the Latvian Designers' Union.

### **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.**

By making evaluation, a reference to information given in Criteria 2.3.1-2.3.3 of Section 3, Part II can be made.

Description of SP resources and provision, information base, material and technical base, compliance with the conditions for the implementation of the study program and achievement of study results can be seen in information given in Criteria 2.3.1-2.3.3 of Section 3, Part II.

**3.3.2. Assessment of the study provision and scientific base support, including the resources provided within the framework of cooperation with other science institutes and higher education institutions (applicable to doctoral study programmes) (if applicable).**

Not applicable.

**3.3.3. Indicate data on the available funding for the corresponding study programme, its funding sources and their use for the development of the study programme. Provide information on the costs per one student within this study programme, indicating the items included in the cost calculation and the percentage distribution of funding between the specified items. The minimum number of students in the study programme in order to ensure the profitability of the study programme (indicating separately the information on each language, type and form of the study programme implementation).**

SP funding sources consist of state budget funding and student tuition fees. The tuition fee is approved by the decision of the RTA Senate for each subsequent academic year.

Costs of the study place of the SP "Fashion design and technology" are determined taking into account the basic costs of the study place, the level, duration, form of the study place, as well as the structure of the academic staff and the field of study, i.e., EUR 1 630.11 (basic payment for the study place) \* 1.8 (minimum study cost coefficient) \* 1 (study level coefficient) = EUR 2 934.20.

In total, the annual study costs of one full-time student in the Republic of Latvia or the EU are estimated at EUR 2,934.20, which does not exceed the costs of European countries for the preparation of one student in a similar specialty.

RTA's calculations confirm that the direct costs amount to EUR 2,200.65 per conditional student per year, the indirect costs (expenses for the operation of RTA, including the RTA library, land tax, lease, rent, building maintenance costs, telephone subscription and service costs), utilities, current repairs, special programs, etc.) per 1 conditional student per year is 733.55 EUR, forecasting the number of students in group 5 and more.

The use of financial resources is in accordance with the distribution approved by the Senate. See the available funding of the study program in Table 3.3.3.1.

3.3.3.1.Table

**Study program "Fashion design and technology" funding**

Financial year	2020	2021
Thematic area of the study program: Production and processing		
Minimum study cost coefficient:	1,8	1,8
Study level coefficient:	1	1
Study base costs (euro)	1518,98/1538,98	1630,11
Scholarship amount (euro)	150,82	200,00
Sports, culture, student hostel (euro)	13,52	13,52
Number of study places financed from the state budget	10	10
Financing for the number of study places financed from the state budget	29 105	31 477

Description of the study, informative, including library, material, technical and financial base available in section 2.3.1.

### 3.4. Teaching Staff

**3.4.1. Assessment of the compliance of the qualification of the teaching staff members (academic staff members, visiting professors, visiting associate professors, visiting docents, visiting lecturers, and visiting assistants) involved in the implementation of the study programme with the conditions for the implementation of the study programme and the provisions set out in the respective regulatory enactments. Provide information on how the qualification of the teaching staff members contributes to the achievement of the learning outcomes.**

The selection of teaching staff at the SP takes place in accordance with the RTA academic staff development guidelines, as well as on the basis of the SP's goal, tasks, planned study results and the principles of a student-centred approach to the RTA study process. The composition of the teaching staff of the SP is designed to provide students with the acquisition of knowledge, skills and research skills in the content of general and branch study courses, achieving the study results specified by the SP, which correspond to the EQF level 5 knowledge, skills and competences specified in the Latvian education classification. The aim of the SP determines two main principles in the selection of lecturers:

- to provide conditions for high-quality preparation of students in the manufacturing industry (light / textile industry), acquisition of current professional skills, specialists of the branch are attracted to the SP, lecturers with professional experience in specialties corresponding to the profile of the SP;
- to increase the competence of the teaching staff, to give an opportunity to learn from each

other, the model of cooperation of the teaching staff is applied in the study process, teaching the study course together. 10 SP study courses are implemented and evaluated by two or three lecturers. Lecturer teams are formed according to the following two principles: 1) the study course is taught by an experienced practitioner and researcher with practical work experience (e.g. study courses Practicum in Fashion Design I,II, Basics of Planning Industrial Production Collections (guest lecturer V.Bulindža, lecturer, researcher S.Mežinska), Computer Graphics (S.Mežinska, A.Strode); 2) the study course is held by lecturers who specialize in one of the thematic sections of the study course and complement each other (study courses Information and Communication Technologies (lecturers J.Musatovs, M.Kijaško, A.Zorins), Environmental and Civil Protection (E.Šiljiņa, Ē. Teirumnieka) and others.

- The planning issues of the RTA academic staff are regulated [RTA operational and development strategy 2016.-2023.](#), [RTA academic staff development plan 2018-2023](#). Other issues related to the planning of the academic staff are regulated by [Regulation of academic position](#), [Regulation for lecturers](#), RTA academic staff development plan ([Mācību metodisko izstrādņu un zinātnisko pētījumu plānošanas, uzskaites, kontroles un apmaksas noteikumi](#)), [Procedures for planning and accounting of study work amount of academic staff](#), [Procedure for evaluation of work quality of academic staff](#) and others.

The qualification of the teaching staff complies with the requirements of regulatory enactments. 17 lecturers have a master's degree, 6 lecturers have a doctor's degree, 2 of the lecturers (V.Bulindža, Z.Pīgožne) are also practitioners with long / sufficient professional work experience, 2 of the lecturers are studying at a doctoral programme.

All elected lecturers once during the election period receive professional development courses "Innovations in Higher Education", which is confirmed by a certificate, which in its turn is required by the RTA in the election process as one of the mandatory conditions. Lecturers are provided with both the acquisition of pedagogical courses at higher education institutions (in the amount of 160 hours) and participation in professional seminars in the field, as well as in practice companies, which ensure the appropriate qualification of the teaching staff and help to achieve study results.

The research and professional specialization of the teaching staff involved in the implementation of the SP covers all the main areas envisaged in the Textile and Leather Product Designer's Standard: Launching of entrepreneurship (Ē. Višķers, A.Čerpinska, J.Volkova); Introduction to research (S.Martena, A.Strode); regulatory enactments and standards (I.Novika, E.Šilina), Computer graphics (A.Strode, S.Mežinska, N.Brokāne), Material Sciences (A.Martinovs, Ē.Teirumnieka, S.Mežinska), Clothing Basic Constructions I, Modelling of Complex Constructions II, (S.Mežinska). Considering that it is a professional SP, it is important that professionals in the field are involved in the provision of study courses, therefore the study course "Clothing Technology and Equipment" is taught by V.Bulindža, production consultant of SIA "AJT Production", with experience in providing product manufacturing process, study course "Basics of Fashion Collection Design and Design of Technological Processes", Z.Pīgožne, designer of SIA "ZelmaKraft", with experience in business organization and product design.

65% of the employed academic staff are elected to the RTA, i.e., the qualification and compliance with the position criteria has been assessed by the competition commission, taking into account the qualification and education of the academic staff, compliance with the academic and practical work experience developments (teaching aids, programs, etc.), the results of student surveys in the event of re-election.

35% of the academic staff are leading specialists and professionals in the field, guest lecturers. In order to strengthen the SP and link the program to the labor market, industry professionals and lecturers within the framework of ERASMUS+ mobility are invited to teach certain topics.

For an overview of the teaching staff employed in the study program see Section 2.3. (see Annex 9, 10, 12, 13).

### **3.4.2. Analysis and assessment of the changes to the composition of the teaching staff over the reporting period and their impact on the study quality.**

During the reporting period, the composition and competence of the academic staff have improved. Although the proportion of elected academic staff has only slightly increased (in 2013 - 63%, in 2021 - 65%), the proportion of lecturers with a doctoral degree has increased from 22% to 31%. If in 2013 4 associate professors, 1 docent and 17 lecturers participated in the implementation of the program, then in 2021, respectively - 2 professors, 4 associate professors, 3 docents, 17 lecturers and guest lecturers.

The synergy of teachers' pedagogical and scientific work has been significantly improved. 14 (54%) of the teaching staff are simultaneously elected to pedagogical and scientific positions. Lecturers elected to academic positions actively participate in scientific conferences and publish in Latvian and international scientific publications, including preparing joint scientific publications with both Latvian and foreign researchers. All the changes in the composition of the teaching staff indicate the growth and development of the teaching staff of the program. During the reporting period (academic years 2012/2013 -2020/2021) there have been no significant changes in the composition of the teaching staff, except for the positive fact that new lecturers who have graduated from RTA master's study programs have joined the teaching staff. 26 lecturers are involved in the implementation of the SP, 17 or 65% of which are elected at the RTA, 9 or 35% are visiting docents. The sufficiently high proportion of elected academic staff ensures the availability of regular lectures and lecturers for students throughout the study process. SP employs 1 professors, 5 associate professors, 4 docents, 8 lecturers, 9 guest lecturers; 8 of the teaching staff are leading researchers and 5 researchers, 1 research assistant, 8 lecturers or 31% have a doctoral degree. For summaries of the teaching staff involved in the SP, see Annex 9 in the SF self-assessment.

To ensure the coherence of SP with the current tendencies and problems of the labour market, the professional program employs professionals with extensive professional work experience: study courses "Clothing technology and equipment" are taught by SIA "ATJ Production" production consultant V.Bulindža, study course "Basics of Fashion Collection Design and Design of Technological Processes" is taught by a designer, SIA "ZelmaKraft" manager Z.Pīgožne, study course "Labour Law" is taught by RTA lawyer I.Novika, etc.

Significant attention is also paid to the English language skills of teachers. The teaching staff involved in the implementation of the program with B2 level systematically increases their English language competence by acquiring English language courses offered by the RTA or in projects. Several teaching staff employed by SP have previous experience of working with foreign students.

35% or 9 lecturers from the academic staff involved in the SP work in the RTA project "Strengthening the RTA academic staff in the study fields "Mechanics and metalworking, heat energy, heat engineering and mechanical engineering" and "Management, administration and real estate management", while 3 lecturers or 14% work at the RTA in the project "Strengthening of the academic staff of Rēzekne Academy of Technologies in the study field "Education, pedagogy and sports". In the projects, lecturers improve digital and professional English skills, develop leadership and cooperation competencies, acquire the content of the English language course using various digital tools, online platforms, etc., training forms that promote the development of leadership and

cooperation skills (problem situations, initiative, joint action planning, etc.), which is further used in the teaching of study courses. In December 2019, the lecturers involved in the project "Strengthening the RTA academic staff in the study fields "Mechanics and metalworking, heat energy, heat engineering and mechanical engineering" and "Management, administration and real estate management" started a professional practice with a merchant according to the study courses. In February 2019, the lecturers involved in the project "Strengthening the academic staff of Rēzekne Academy of Technologies in the study field "Education, pedagogy and sports" started professional in-service training in various general education institutions of Latvia, which are cooperation partners of the RTA, according to the field of courses.

The provision of SP has been supported for several years by co-operation partners abroad, who are guest lecturers from Vilnius University of Applied Sciences, Vilnius Academy of Arts, Telšiai Faculty (Lithuania), who improve students 'artistic design, computer design training in the specialized computer program Gerber AccuMark, clothing design skills, as well as create an international environment on a daily basis that can facilitate SP students' involvement in Erasmus + mobility.

During the reporting period, foreign guest lecturers and industry professionals from Lithuania, Estonia, Bulgaria and Russia have been involved. The attraction of guest lecturers is regular, every year they are lecturers prof. E.Strazdiene, lect. L.Gerulaitiene, lect. L.Malinauskiene, lect. I.Valantinaite, lect. M.Polunina (Vilnius University of Applied Sciences, Lithuania), lect. J.Baniene, (Utena University of Applied Sciences, Lithuania), prof. Ļ.Lazovs (Bulgaria), prof. A.Traumann, lect. T.Peets (Tallinn University of Applied Sciences (TTKT), Estonia), lecturer N.Elisejeva, O.Pospelova and others (Pskov State University, Russia). In total, they are 14 lecturers who have shared their experience in professional study courses in the field of clothing technology, specialized computer design programs, photo measurement methods, laser technology and textile fabric research and other topics.

The study courses Fashion Design II (in academic years 2018-2020) Professional Practice II use a problem-based learning approach (PBL). Within the framework of the project "SalesLabs for employability competencies development /"Improvement of Employment Competences in Sales Laboratories", Lecturer of the study course S.Mežinska has mastered the PBL method and, in cooperation with the RTA Project Management and Technology Transfer Contact Point, reports on current issues for entrepreneurs and students, performs product design, commissioned research. From now, starting by the academic year 2022/2023 it is planned to increase the number of study courses using the PBL method during the academic year.

**3.4.3. Information on the number of the scientific publications of the academic staff members, involved in the implementation of doctoral study programme, as published during the reporting period by listing the most significant publications published in Scopus or WoS CC indexed journals. As for the social sciences, humanitarian sciences, and the science of art, the scientific publications published in ERIH+ indexed journals or peer-reviewed monographs may be additionally specified. Information on the teaching staff included in the database of experts of the Latvian Council of Science in the relevant field of science (total number, name of the lecturer, field of science in which the teaching staff has the status of an expert and expiration date of the Latvian Council of Science expert) (if applicable).**

Not applicable.

**3.4.4. Information on the participation of the academic staff, involved in the implementation of the doctoral study programme, in scientific projects as project managers or prime contractors/ subproject managers/ leading researchers by specifying the name of the relevant project, as well as the source and the amount of the funding. Provide information on the reporting period (if applicable).**

Not applicable.

**3.4.5. Assessment of the cooperation between the teaching staff members by specifying the mechanisms used to promote the cooperation and ensure the interrelation between the study programme and study courses/ modules. Specify also the proportion of the number of the students and the teaching staff within the study programme (at the moment of the submission of the Self-Assessment Report).**

The models of cooperation of the teaching staff employed in the program correspond to the self-assessment common to the whole SF. The co-operation of the teaching staff of the SP is presented by several aspects of the co-operation characteristic of the specifics of the RTA activity:

- 1. Interdisciplinary cooperation of the academic staff** - the teaching staff of different fields is employed in the program, who, when meeting at the general meetings of the SF, can discuss topical issues in achieving study results, using study methods, and evaluating study results. SP has a productive cooperation with SF "Mechanics and Metalworking, Heat Power Engineering, Heat Engineering and Mechanical Engineering" and "Arts". Lecturers carry out joint projects and participate in the implementation of study courses, for example, the study course "Material Sciences" is taught by Ē.Teirumnieka, S.Mežinska, A.Martinovs.
- 2. Joint scientific activity of the academic staff** - joint scientific publications are both interdisciplinary and developed in related fields, for example, research of laser processing of textile fabrics, development of product (uniform) design, experience in the implementation of cooperation projects, etc. In cooperation with the above-mentioned SF, lecturers carry out joint researches, participate in the implementation of RTA scientific grant projects, prepare publications, participate in conferences.
- 3. Cooperation of elected academic staff - visiting lecturers** can be assessed as successful, because the elected academic staff forms the academic core of the SP, which is supplemented by guest lecturers. RTA has identified a number of tasks related to the pedagogical and methodological support of guest lecturers, especially when starting academic activities for new lecturers. For this purpose, RTA offers free in-service training courses that guest lecturers can use. The study program includes study courses, which are taught by several lecturers and where there are mutually agreed topics, the mechanism of evaluation of study results, there is direct cooperation in the implementation of study courses, e.g., study course "Computer Graphics" is taught by A.Strode, S.Mežinska, N.Brokāne, study course "Basics of Fashion Collection Design and Design of Technological Processes" is taught by S.Mežinska, Z.Pīgožne, study course "Environmental and Civil Protection" is taught by Ē .Teirumnieka, E.Šilina.
- 4. Cooperation between teaching staff and support staff.** Cooperation between teachers

and ICT specialists, ensuring distance learning during the pandemic, cooperation between teachers and general staff is especially important for the implementation and development of SP. RTA has set up its own internal document management system (DMS), which also contains the possibilities for planning and controlling cooperation. Most collaboration models during the state of emergency at the RTA are provided by the *Microsoft Teams*

5. **Cooperation between lecturers and students.** In March, April 2020, due to the Covid-19 pandemic, a state of emergency was established in Latvia, which determined the priority of new cooperation models. The study process at RTA was implemented remotely, using all possible remote communication tools. The dominant communication portal of RTA was the study course website *ekursi.rta.lv*, as well as the online tools *Microsoft Teams*, *Zoom*, *WhatsUp*, *Skype*, etc. At the time of submitting the self-assessment report, RTA has developed a procedure for the implementation of distance learning and the evaluation of the first distance learning stage is being carried out..
6. **Cooperation of professionals in the field with those lecturers, for whom the Academy is the main place of work.** The SP "Fashion Design and Technology" is implemented in several directions:
  - Cooperation between the RTA professional practice supervisor and the company's professional practice supervisor during the student's professional practice;
  - participation in the work of the state qualification examination committee;
  - research collaboration, participating in projects, presenting research results,
  - co-operation in the process of raising the pedagogical qualification, jointly attending the events of the RTA professional development program "Higher education didactics" or "Innovations in higher education", as well as discussing topical issues of the study process.

At the time of submitting the self-assessment report, the ratio of the number of teaching staff and students in the study program is **11**, which is formed by dividing the number of students in the PLE program (8.4) by the number of teaching staff in PLE (0.8), full-time students are taken into account for the calculation of this indicator. The ratio of teaching staff to students in the program is slightly lower than the Latvian average in short-cycle programs (13) and the OECD average (15)<sup>1</sup>. However, taking into account the professional orientation of the program and the inversion of financial risks, the number of fewer students promotes individual work with students and a student-centered approach to the study process.

<sup>[1]</sup> 1 EDUCATION AT A GLANCE 2021 © OECD 2021. Available: <https://ieej.lv/gHSYU>, pp.355.

## 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 1.7z	1.pielikums.7z
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 2.docx	2.pielikums.docx
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 3.docx	3.pielikums.docx
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 4-1.docx	4.pielikums-2.docx
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)		
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	Annex 5.xls	5.pielikums.xls
The curriculum of the study programme (for each type and form of the implementation of the study programme)	Annex 6.docx	6.pielikums.docx
Descriptions of the study courses/ modules	Annex 7.docx	7.pielikums.docx
Description of the organisation of the internship of the students (if applicable)	Annex 8.docx	8.pielikums.docx
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)		

# Food processing (41541)

Study field	<i>Manufacture and Processing</i>
ProcedureStudyProgram.Name	<i>Food processing</i>
Education classification code	<i>41541</i>
Type of the study programme	<i>First level professional higher education study programme</i>
Name of the study programme director	<i>Inese</i>
Surname of the study programme director	<i>Silicka</i>
E-mail of the study programme director	<i>Inese.Silicka@rta.lv</i>
Title of the study programme director	<i>Mg.soc.sc., Mg. paed., lektore</i>
Phone of the study programme director	<i>+371 29467160</i>
Goal of the study programme	<i>To prepare qualified specialists who are competitive in the Latgale region and national labor market in the field of food processing in accordance with the requirements of the fourth professional qualification level Food Production Specialist profession, knowledge, skills, competencies and first level professional higher education specified in the fifth level of the Latvian Qualifications Framework standard requirements.</i>
Tasks of the study programme	<ol style="list-style-type: none"> <li><i>1. To theoretically and practically prepare food production specialists in accordance with the standard requirements of the food production specialist profession, developing students' skills, attitudes, professional knowledge and competencies for work in the food sector;</i></li> <li><i>2. To promote the development of general skills and competencies for students, including communication, presentations, ability to work in a team, social dialogue, leadership, etc. skills.</i></li> <li><i>3. To develop students' skills in the program to apply a scientific approach to solving problems and to carry out research activities, to develop creative work skills and abilities;</i></li> <li><i>4. To ensure the improvement of the content of the study program and the study process in accordance with the changes in the market requirements.</i></li> <li><i>5. To prepare the holders of professional qualifications for studies at the bachelor's level, to promote students' self-education by improving their knowledge in the field and in the field of professional activity.</i></li> </ol>

Results of the study programme	<p><i>K1 Demonstrate and apply the general and specialized knowledge required for the profession of food production specialist at the level of perception, understanding and use.</i></p> <p><i>K2 Is able to show an understanding of the most important concepts and regularities of the relevant field of food science.</i></p> <p><i>S1 Is able to evaluate, improve one's own and other people's activities, work in cooperation with others, plan and organize work to perform specific tasks in food production and work organization in the food chain (full and / or part of the production cycle) company and other related organizations.</i></p> <p><i>S2 Is able to make decisions and find creative solutions to professional problems in food production, where changes are possible in changing or uncertain conditions.</i></p> <p><i>S3 Is able to explain practical issues in the field of food production, argue, express their views and discuss with colleagues, customers and management.</i></p> <p><i>S4 Using the acquired knowledge and skills, is are able to continue his/her further education and professional development.</i></p> <p><i>S5 Based on an analytical approach, is able to perform practical tasks corresponding to the qualification of a food production specialist in a company of different levels and types of food chain (full and / or part of the production cycle) and in other related organizations.</i></p> <p><i>C1 Is able to formulate, calculate, describe, analyse and solve practical problems in food production processes.</i></p> <p><i>C2 Is able to select, classify and evaluate information related to the safe, secure production of food and use it in decision-making in the operation of the food business (full and / or part of the production cycle).</i></p> <p><i>C3 Is able to take responsibility and initiative by working individually or in a team working in a food chain (full and / or part of the production cycle) company and other related organizations.</i></p> <p><i>C4 Is able to assess the role of food production and the importance of information in a wider social context, i.e., the impact of his / her professional activities on the environment and society.</i></p> <p><i>C4 Is able to assess the role of food production and the importance of information in a wider social context, i.e., the impact of his / her professional activities on the environment and society.</i></p>
Final examination upon the completion of the study programme	Qualification paper

## Study programme forms

### Full time studies - 2 years, 6 months - latvian

Study type and form	Full time studies
Duration in full years	2
Duration in month	6
Language	latvian
Amount (CP)	100

Admission requirements (in English)	<i>Secondary education</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>Food production specialist</i>

### Places of implementation

Place name	City	Address
Rēzekne Academy of Technologies	RĒZEKNE	ATBRĪVOŠANAS ALEJA 115, RĒZEKNE, LV-4601

### Part time extramural studies - 3 years - latvian

Study type and form	<i>Part time extramural studies</i>
Duration in full years	<i>3</i>
Duration in month	<i>0</i>
Language	<i>latvian</i>
Amount (CP)	<i>100</i>
Admission requirements (in English)	<i>Secondary education</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>Food production specialist</i>

### Places of implementation

Place name	City	Address
Rēzekne Academy of Technologies	RĒZEKNE	ATBRĪVOŠANAS ALEJA 115, 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.**

In 2021, the Director of the RTA Program “Food Processing” participated as an expert in the LOSP working group in the development of the professional standard “Food Production Specialist”, which was strengthened by the Tripartite Cooperation Council for Vocational Education and Employment at its meeting on June 9, 2021, protocol No. 4. (<https://registri.visc.gov.lv/profizglitiba/dokumenti/standarti/2017/PS-154.pdf>). Managers or leading specialists of several large companies were involved in this process. The previous standard of the profession was radically revised. The new standard incorporates updated requirements for the professional qualification of a food production specialist. According to the updates, during 2021 the RTA study program “Food Processing” was revised, including the latest requirements of the industry. Thus, when preparing the accreditation materials, the recommendations of the study program licensing commission experts were taken into account (the license was issued on 06/07/2016 and the implementation of the study program started in the 2016/2017 academic year) and the study program was revised according to the new professional standard requirements (see Appendices 5, 6), i.e., the aim, tasks and study results of the program were specified in accordance with the new professional standard. The part of general education study courses includes the study courses “Starting a Business”, “Environmental and Civil Protection” in accordance with the requirements and regulations of the Environmental Protection Law and the Civil Protection and Disaster Management Law on the 1<sup>st</sup> level professional higher education state standard: Regulation No. 141 “Regulations on the State Standard for First-Level Professional Higher Education”. Food production technology courses are combined in two study course modules, i.e., Plant Origin Food Production Technologies and Equipment (11 CP) and Animal Origin Food Production Technologies and Equipment (14 CP). The content of the study program is based on the recommendations of employers, so the study course “Development of New Food Products” was already in the study program (recommendation at study program licensing), but the topicality of this study course and the increase of credit points were recommended to be included in the study program by representatives and graduates of Rēzekne Business Incubator, for example, many of the students in the business incubator have participated in both the Pre-Incubation Support Program and the Incubation Support Program. Other program parameters have not been changed.

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

The name of the SP is formed in accordance with the thematic group “Engineering, manufacturing and construction” of the Education and Training Sector Classification (ISCED-F 2013), which belongs to the thematic area “Production and processing”, which belongs to the thematic area “Production and processing”, which in turn belongs to the group of educational programs “Food production technologies and production of products” (part of code 541).

The title, aim, tasks, professional qualification and study results of the SP „FOOD PROCESSING” are interrelated and defined in accordance with:

1. A framework for national classifications in line with the European Qualifications Framework. The SP corresponds to LQF level 5, therefore study results are defined in accordance with the descriptions of knowledge, skills and competences corresponding to level 5, provided by the Cabinet Regulation No. 332 “Regulations on the Classification of Education in Latvia” of 13/06/2017.
2. Requirements of the fourth professional qualification level professional standard Designer of Textiles and Leather Products (specialization Fashion Designer), following that the content of the SP corresponding to the professional standard correlates with the goals, tasks and study results defined by the SP (see Appendix 4).
3. In accordance with the balance of general education study courses, branch (field of professional activity) theoretical basic courses and specific professional specialization courses (compliance with the state education standard, see Appendix 3), which is provided by the Cabinet Regulation No. 141 “[Regulations on the first level professional higher education state standard](#)”(Latvian only).

The aim of the study program: in accordance with the requirements of the labor market (Food production specialist profession standard, code 216310) and the requirements of the first level professional higher education (state education standard) to ensure the acquisition of the 4<sup>th</sup> qualification level (5 LQF level) professional higher education in food production.

The synergy of theory and practice in the field of food processing, specializing in clothing design, is also the focus of SP study results, which plan not only the acquisition of specific knowledge, but also the development of certain skills and competencies. In order to effectively achieve the results of the SP, RTA applies a study process based on a student-centered approach, which envisages the development of students' independence, entrepreneurship and initiative. An essential precondition for successful achievement of study results is the contingent of enrolled students.

Admission to SP takes place on the basis of the requirements of the Law on Higher Education Institutions of the Republic of Latvia, the regulations of the Cabinet of Ministers on the requirements, criteria and procedures for admission to SP and RTA admission regulations. SP applicants are admitted on the basis of 3 centralized state examinations: in mathematics, Latvian and a foreign language (one foreign language, including English, German or Russian, according to the applicant's choice). Additional points in the admission requirements are applied to the winners of the competitions, graduates of the Eastern Latvian Secondary School of Technology and holders of the Junior Achievement Latvia certificate.

Coefficient of the competition applicants for admission to the SP „Food processing” 2016/2017 2 applicants per one budget study place; 2017/2018 – 2,5; 2018/2019- 2,0; 2019/2020 – 2,0; 2020/2021- 3,0; 2021/2022- 2, applicants per one budget study place, which is sufficiently stable in the whole period among the admission indicators of the RTA, it shows that students purposefully choose this SP and it is specific and required SP at the RTA. When evaluating the previous education competence of matriculated students, it should be noted that the average certificate /

diploma mark in 2020, rounded off, was 6 points (almost good), but for 2021 applicants - 7 points (good). The statistical data of the last two years show the trend of the whole period - the vast majority of applicants have mastered the previous education programs well and are sufficiently prepared for studies in the first level professional higher education program.

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

One of the goals of the operational program "Latgale ID" is study programs based on the needs of companies in higher education institutions and vocational education institutions. "Latgale ID" sub-programs the aim of the sector pilot program "Healthy Food" is to establish cooperation between agricultural companies, state institutions, universities, vocational schools, municipalities, etc. Sectoral programs that correspond to the Latgale strategy directions "Skills" and "Efficient companies" and are aimed at increasing income in the region. The program corresponds to the LIAS 2030 priority "Innovative and eco-efficient economy". To achieve the goal, support for higher education institutions and vocational education and lifelong learning institutions in the training of young specialists is established as an action measure. The compliance of the program with the labor market is ensured by maintaining cooperation with employers, including Latvian Federation of Food Companies, Rezekne Special Economic Zone, and Rezekne Entrepreneurs' Association.

The program offers a wide range of food processing technologies (meat, milk, grain, beverages, vegetables, fish), with an emphasis on production technologies and the acquisition of technological equipment and process organization. Specialists are trained for work in accordance with the standard requirements of the food production specialist profession for food chain (full and / or part of the production cycle) companies and other related organizations, which have developed in large numbers not only in Eastern Latvia, but also in the whole territory of Latvia. According to AIKA data [6], AIC SF-compliant SP in Latvia are implemented by three higher education institutions (Latvia University of Life Sciences and Technologies, Rīga Technical University Agency "Olaine Technology College of Rīga Technical University" and Rēzekne Academy of Technologies). RTA is the only higher education institution in Latgale region that offers such a study program. RTA is the only one to implement the first level professional higher education SP, which complies with the professional standard "Food Production Specialist", this fact justifies the special significance of the program and, to a certain extent, its uniqueness in Latvia. Other mentioned educational institutions carry out either professional bachelor's level studies in the relevant field or first level professional education studies in other fields corresponding to the SF.

When developing the SP, it was compared with the corresponding SP in Latvia. RTA is the only higher education institution in the country that prepares food production specialists of the 4<sup>th</sup> professional qualification level for food industry companies. Industry demand and support for the training of 5<sup>th</sup> LQF level specialists in food production is expressed by including the profession in the qualification structure of the food industry.

The RTA study program provides educational succession for specialists who have obtained secondary professional education (3<sup>rd</sup> professional qualification level program "Food Production Technician"). After graduating from the RTA Study Program, it is possible to continue studies in the later stages of studies to obtain a 5<sup>th</sup> level professional qualification. The study program is designed to provide locally rooted and globally competent studies, to provide an opportunity to obtain a professional qualification in food production. The program implemented by the RTA can be studied

in Latvian.

Graduates of the study program can become specialists in the organization of production / processing processes, entrepreneurs and / or middle managers in the manufacturing industry, actively participate in business development, as well as create new jobs by creating their own companies. RTA annually analyzes the data of the State Employment Agency on RTA graduates who have registered as unemployed. According to the information received in 2021, the graduates of the study program have not been registered in the list of the unemployed in the period from 2019 to 2021. Evaluating the situation, it was found that out of 9 graduates of the study program 1 continues his/her studies in another study program implemented by the RTA, 2 - have established their own companies in the field of food processing, 6 - work in full / part-cycle food companies, all graduates are food industry specialists.

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

The study program "Food Processing" at RTA has been implemented since the academic year 2016/2017. RTA is the only educational institution in Latgale and Vidzeme regions that prepares food production specialists of the 4<sup>th</sup> professional qualification level for food industry companies. The industry's demand and support for the training of food production specialists is expressed by including this profession in the qualification structure of the food industry.

In the academic year 2021/2022 **35** student is studying full-time in the SP (for statistical data on students in the reporting period see Appendix 2).

During the reporting period, the number of students in the study program does not change significantly. In the period from the academic year 2016/2017, the study program is mainly chosen by working people, as well as those who are self-employed or want to establish companies in the field of food production, who have already received education in other fields, such as economics, professional bachelor's degree, therefore, evaluating the results of admission, starting by academic year 2022/2023 it is planned to admit students to part-time studies, as working students cannot always successfully combine work with full-time studies.

SP full-time studies are characterized by a drop in the number of students in both the first and the third year. For most students who have been expelled due to failure, their abilities are adequate for successful completion of the SP; many of them are working and are unable to combine work with the study process, often they have work in another city, because the region (city) has difficulty finding work. Professional workload does not allow for a full focus on studies. The situation with Covid-19 has had an impact in the last two years. Consequently, students do not meet the requirements set in the study process. Many of the students find a job in Rīga, the workload is high, as a result students do not return from academic leave (reasons - becoming parents, change of residence, etc.). A large proportion of students who have been expelled for failure have completed almost all study courses but have not developed and defended their qualification paper. Such students resume their studies after 1 or a few years and complete the SP.

The average wage in the sector in the statistical regions is also an important factor. In 2021, according to the CSB data, Latgale has the second lowest salary in the industry (987 EUR gross)

after Kurzeme (875 EUR gross). For comparison, the average gross salary in Rīga and Pierīga is 1171 EUR.<sup>[1]</sup>

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

Not applicable.

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

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

The study programme is established in accordance with the Cabinet Regulations No. 512 “Regulations on the State Standard for First-Level Professional Higher Education” (see Appendix 3) and the occupational standards of the profession Food Production Specialist, Level 4 of professional qualification (see Appendix 4). See the plan of the study programme in Appendix 6. The study programme fully complies with the “Regulations on the State Standard for First-Level Professional Higher Education” and the occupational standard of the profession Food Production Specialist.

The content and scope of the study courses included in the study program ensure the acquisition of knowledge, skills and competencies specified in the professional standard of a food production specialist.

SP scope - 100 CP, including:

1. General education study courses - 21 CP (21%);
2. Compulsory courses of the branch (professional field of activity) - 24 CP (24%);
3. Branch (professional activity) specific profession courses - 51 CP (51%) (including professional practice - 16 CP (16%) and qualification paper - 8 CP (8%));
4. Elective courses - 4 CP (4%).

(See SP plan in Appendix 6).

The expected results of the study courses are developed in accordance with the goals and tasks of the study program. The goals and results to be achieved for the study program are formulated, from which the goals and study results of each study course are derived, i.e., what a student is able

to acquire in the study program as a whole and what a student is able to acquire in a separate study course. The results of the study courses are related to the basic tasks of professional activity specified in the professional standard of a food production specialist, the skills, knowledge and competencies required to perform the basic duties of professional activity, which are justified by the changing environment of the modern labor market (see the descriptions of the study courses of the study program in Appendix 7).

See Annex 5 for the mapping of the study courses to achieve the results of the study program.

The mapping of the study results of the study program and study courses shows that the study results defined in the study courses ensure the fulfilment of the study results of the study program, allow to achieve the goal of the study program and fulfil the tasks. In its turn, the conditions for the assessment of study results defined in the study courses and the study program allow to determine the level of performance of study results at the level of knowledge, skills and competences.

The assessment criteria are designed so that they correspond to the study results, are reasonable, verifiable and available to the student at the beginning of the study program and individual study courses. Study course programs are available in the [www.lais.lv](http://www.lais.lv) system.

In order to ensure the connection of the content of study courses, the achievable SR with the goals of the SP and the results to be achieved:

1. **the lecturer plans the results of the study course in accordance with specific SP results**, which are reflected in the form of the study course program; if the study course is taught by several lecturers, they shall agree on the study results of the study course and the procedure for their evaluation;
2. the lecturer **coordinates** the SR defined in the study course **with the SP director**, who is responsible for determining the SP SR;
3. all **study course programs are approved at the meeting of the SF Council**, pre-evaluating whether the content of the study course does not overlap, whether it is in accordance with the content of programs corresponding to EQF level 5, whether the student's independent work is reasonably included and the latest literature of the field (incl. in English) is included, whether the planned examination forms are able to fully assess the competencies acquired by the student, etc. issues;
4. in order to control the planning of SR of study courses, the director of the SP conducts a mapping of study courses, which allows to verify and, if necessary, adjust the content of study courses to ensure the fulfilment of the objectives and results of the SP.

The qualification of a professional food production specialist is obtained and the professional diploma is received by those students who, in the study process, certifying the achievement of the planned study results, have: have successfully passed all the examinations provided for in the study program in the study courses; have shown professional skills during the studies, obtaining a positive evaluation of the practice; have developed research work skills, performing and successfully defending study projects and qualification work. The evaluation of the topicality of the content of the study courses, compliance with the needs of the branch and the labor market is a mandatory study quality measure at the RTA, it is performed in several stages and coordinated with the study schedule (see Annex 23).

In the general education study courses of the study program, students acquire and improve social dialogue, communicative, organizational, work and copyright, environmental, civil and labor protection skills. In order to strengthen the professional foreign language skills and competences of the students of the study program, the integration of a foreign language into general education and professional courses, as well as study courses (Introduction to Humanities, Introduction to

Research; Information and Communication Technologies) is taught bilingually, i.e., in Latvian and English. The study program is designed so that students acquire and develop business competencies, i.e., business planning, organization and management, communication skills and competencies. The (professional) study courses of the branch are designed in accordance with the development trends of the branch, e.g., food packaging materials and packaging technologies, food production technology courses are combined in two study course modules, i.e., Plant Origin Food Production Technologies and Equipment (11 CP) and Animal Origin Food Production Technologies and Equipment (14 CP). Great importance is also pointed towards food quality management and assurance issues, development of new foods, etc. The content of the study program is made up of both theoretical and professional specialization study courses in the food industry, which meet the standard of the food production profession and are attractive to students and potential applicants, professional practice in the amount of 12 CP is implemented. The choice of elective courses (in the amount of 4 credit points) is regulated by RTA "Regulations on Elective Courses in Academic and Professional First Level and Bachelor Study Programs of the RTA) approved at the meeting of the Study Council, which stipulates that the student can choose a study course from the RTA elective course catalogue, giving preference to study courses that do not require special prior knowledge or study courses applied for by more than 15 students. The amount of one study course is 2 CP. Students' opinions and recommendations were taken into account in the development of the content of the study program, for example, the study course "Sensory Evaluation of Food Products" and part C of the elective course offer students the opportunity to choose the study course "Cooking Technologies and Equipment", which was introduced according to students' recommendations, as many graduates work in catering companies or students want to do practices in catering companies, which are full / part-time food businesses and / or set up their own catering businesses. The evaluation of the development tendencies of the scientific research of the study program appears in the study research works and study courses, mainly in the study courses "Introduction to Research" and "Study Project". The module of students' scientific work consists of 1 study project and a qualification paper. The study project has a theoretical, applied orientation, its task is to strengthen the student's knowledge and skills acquired in the respective study year (according to the study plan in 2<sup>nd</sup> year full-time and 3<sup>rd</sup> year part-time studies), promoting development and strengthening of student's research skills, problem solving, analytical and design-thinking skills, as well as practical experience in improving novel foods or existing production processes.

Qualification paper is a research with a theoretically practical orientation, as a result of which its author provides independently developed findings, conclusions, proposals for the solution of a problem / user need, proves his readiness to operate in the food industry. Students choose the topics of study research projects by linking the results achieved in the study courses, the results to be achieved in the research work and the problems / needs of the food industry and the topicality of new and / or existing food products and technologies. In order to strengthen the knowledge of foreign languages, to ensure the quality of study projects and qualification papers, students use literature in a foreign language for their research work. It should be noted that the content and structure of the first level professional higher education study program "Food Processing" has been developed by comparing the content of the study program with the study programs implemented in other Latvian higher education institutions and EU countries (see Section 2.1.1). Students have the opportunity to publish scientific researches and report on scientifically practical researches at the annual international scientific and practical conferences of students and lecturers of the RTA "Human. Environment. Technology", inclusion of the scientific journal "Latgale National Economy Research" in the cited databases, where participation for RTA students is free of charge. The teaching staff of the study program is involved in the implementation of international cooperation projects in related fields (see Annex 22) and in the performance of commissioned researches, which ensures the implementation of the latest achievements in the field in the study process.

**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 assessment criteria are designed so that they correspond to the study results, are reasonable, verifiable and available to the student at the beginning of the study program and a separate study course. The evaluation criteria in the study courses, the form and procedure of the examination are determined by the lecturer, providing it in the study course program, thus they are available to the students. The study course program is available to students in the [www.lais.lv](http://www.lais.lv) system, thus the assessment requirements are clear and accessible when students start learning the course. Self-reflection and mutual evaluation are important forms of assessment during studies. The "[Regulations on examinations and tests of study courses at the RTA](#)" stipulate that "the lecturer organizes each study examination in such a way that the formative (regular) evaluation during the study semester forms at least 40% of the summative evaluation at the end of the study course". The regulations on the procedure for the development of study course programs approved by the RTA Study Council stipulate that the criteria and methods for the assessment of study results must be published at the beginning of the study course and must be consistently and fairly applied to all students and performed according to a previously published procedure. RTA has a consultation system for academic staff, which is also included in the workload of academic staff to provide feedback to students on the assessment of their learning outcomes. Assessment is increasingly practiced by more than one lecturer (these are commissions in state examinations, defense of study papers, practices and study courses taught by more than one lecturer). The amount of content to be included in the examinations corresponds to the content specified in the course programs and the skills and knowledge requirements specified in the professional standard. In the form of full-time studies of the study program, contact hours make up 40% of the volume of the study program, in part-time studies - 15% of the volume of the study program.

In order to achieve the overall results of the study program within the framework of each individual study course, students are introduced to the aims, tasks and achievable results of the study course, as well as the evaluation rules at the beginning of each study course. The criteria for evaluating knowledge in study courses, the form and procedure of the examination are determined by the

lecturer. Students are informed in a timely manner about the evaluation criteria for exams, tests and other tests. The assessment system is being improved, also taking into account the results of student surveys. The total assessment of the study course is formed as the totals of individual works to be performed during the acquisition of the study course and the obtained assessments (tests, reports, study projects, etc.). In order to ensure the students' ability to independently direct the development and specialization of their competencies, to carry out work, research or further study independently, students study independent work, which makes up 85% (in part-time studies) and 60% (in full-time studies) of the study program. Planning of independent work in each study course is performed at the beginning of the semester, coordinating it with the students and including the requirements in the study course program, which is available on the [RTA e-course website](#).

The study process in part-time studies envisages an orientation session (classes in auditoriums, laboratories - lectures and practical classes, laboratory works), students' independent work (tests, reports, study works, practices) and exam sessions. In the study course programs, according to the specifics of the study course, lectures, practical classes, laboratory works and students' independent work are provided. Contact hours are organized taking into account that students have different experiences and previous knowledge. Acquisition of new knowledge, in addition to the presentation of industry news in the form of a lecture, is based on the ability to integrate knowledge from different fields, to contribute to the creation of in-depth or expanded knowledge, research or professional development methods, depending on the specifics of the course. During the lectures, students are asked questions and discussions are encouraged. During the practical and laboratory classes, students develop product recipes, manufactures (prepares) a product prototype, evaluates raw materials and intermediate and final products, prepares samples for laboratory evaluation, performs calculations, develops technological documentation necessary for product production organization and makes conclusions based on the theoretical knowledge acquired in study courses. Students, in accordance with the study course program, develop practical works, presentations, perform tests, as well as independently acquire certain issues of the study course.

In order to ensure the individual learning needs of students, an important role in the study process is given to individual consultations (20 hours per semester), the schedules of lecturers' consultations are publicly announced on the RTA website and in an accessible way at the faculty. Communication between students and lecturers also takes place by phone, with the help of *e-mail*, *Skype and Whatsapp*, [e-course website](#) (<https://ekursi.rta.lv/>)(Latvian only), *Teams* and *Zoom* communication platforms, as well as in the RTA laboratories under the supervision of lecturers (consultations), engineers, laboratory assistants to perform experiments in the development of new food products in study projects and qualification papers.

At the end of each study course and in the process of its acquisition, the lecturer analyzes the study results, student surveys are conducted. The results are discussed at the meetings of the SF Council and at the general meetings of SF lecturers. If necessary, adjustments are made to the study results of individual study courses.

The principles of student-centered education in the study program and individual approach to students are provided in the following way:

1. orientation and exam sessions for part-time studies are planned on weekends: Saturdays and Sundays, from 8.00 to 20.00.
2. Students are provided with handout study materials (during classes) and study course materials are available on the [e-course website https://ekursi.rta.lv/](#)).
3. in case the student has not been able to attend the exam session due to justified reasons,

- the lecturer agrees with the student on individual consultations;
4. in the organization of research work (selection of study project and qualification paper topics) the sphere of students' interests (previously gained experience in the development of research work), specifics of practical work and experience are respected;
  5. in the organization of research work (study project and qualification paper management) the wishes of students in the choice of the supervisor are taken into account, promoting interpersonal communication and as a result increasing the quality of research work;
  6. lecturers are available for students in accordance with appointment schedule, as well as by individually arranging a consultation;
  7. information about changes in the study process, corrections of practical work and other information is mainly sent to students by e-mail. For this purpose, a unified e-mail has been created for RTA students at [name.surname@edu.rta.lv](mailto:name.surname@edu.rta.lv) , which is given to all matriculated students.

To achieve the study results, the RTA library is available, computer classes are available in the academy, and Wi-Fi wireless internet is freely available. Starting the implementation of SP in full-time studies will encourage those who have acquired the first level professional higher education to continue their studies and obtain the second level professional higher education, thus also to increase the level of their professional education and competitiveness in the labor market. Form of implementation of the study program - part-time studies determine the personal interest of students to acquire new knowledge and skills, increase the level of their professional education and competitiveness in the labor market.

RTA implements commissioned research, where 2<sup>nd</sup> year students of the study program "Food Processing" are actively involved and a problem-based learning approach (PBL) is used, where students participate in solving practical tasks relevant to companies (see Section 3). During the academic year 2022/2023 it is planned to acquire this learning method in one of the study courses "Planning and Organization of Production Processes in Food Chain Companies" in the amount of 3 CP (4<sup>th</sup> semester).

**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 procedure for organizing the practice at the RTA is regulated by the "Regulations on internships at the RTA" approved by the Senate. „[Nolikums par praksēm RTA](#)”(Latvian only). The Regulations define the types, goals and tasks of the practice, organizational issues, the procedure for defending the practice at the RTA, and the methodological instructions for the practice approved by the SF SP (see Appendix 8). (see [ekursi.rta.lv](http://ekursi.rta.lv)).

In order to gain practical experience and improve skills, professional practice outside the educational institution for SP students is provided in the amount of 16 CP = 24 ECTS (16 working weeks), which is in accordance with the Cabinet Regulations No. 141 "[Regulations on the State](#)

**Standard for First-Level Professional Higher Education”** (Latvian only) According to the aim and tasks of the study program, the requirements specified in the professional standard of food production specialist (see Appendix 3), the professional practice program, practice 16 CP (incl. Introductory practice in food production 4 CP) (hereinafter - Introductory practice) and Production practice 12 CP) is coordinated with the results of the study program.

The practice in the professional program is implemented in accordance with the practice agreement on the provision of the practice place or in accordance with the decision of the RTA Study Council on the provision of the practice place in the higher education institution itself. The RTA has established long-term and successful cooperation with employers and employers' organizations in the city of Rēzekne, Latgale region and other regions of Latvia. (see Appendix 15 for information on agreements on the provision of student practices). The aim of the professional practice is to strengthen students' theoretical knowledge, to improve their professional skills and abilities in accordance with the requirements of the food production specialist profession, as well as to provide an opportunity to develop skills and abilities to conduct applied research in the relevant field of food industry. See Appendix 8 for the types of practice provision for students in the study program.

In order to facilitate the fulfillment of practice tasks for students, basic practice agreements have been concluded, mainly with local companies of Latgale region, branches of foreign companies, private companies (Rēzekne, Krāslava, Preiļi, Jēkabpils, Aizkraukle region companies etc.). In connection with the study content, it is possible to complete the practice program in the offered practice places.

For the planning and successful implementation of the SP practice, a tripartite short-term practice agreement is concluded between the RTA, the employer at the practice place and the student, specifying the practice goals, tasks, deadlines, as well as the practice supervisors (at the practice company and the RTA SP).

In the study program, professional practice (Introductory practice in food production 4 CP) is planned for full-time students in the 2<sup>nd</sup> semester of the first study year and Production practice in the amount of 12 CP - in the 5<sup>th</sup> semester of the third study year. In the study program, professional practice for students in part-time studies (Introductory practice 4 CP) is planned in the 5<sup>th</sup> semester of the second study year, in the 6<sup>th</sup> semester of the third study year (Production practice 12 CP). In addition, laboratory work is carried out in all study courses of the field (professional field of activity), based on the acquired theoretical knowledge about food production technologies and equipment. The laboratory works cover a wide range of issues, which allows to get to know, understand and acquire the basic principles of food production and new product development.

Professional practice is focused on the fulfillment of the study results specified in the study program (see Appendix 8). It is based on the use of the acquired knowledge and previous experience and the acquisition of practical skills in manufacturing companies - practice places. The aim of the professional practice is to strengthen and supplement the student's knowledge, improve skills and develop professional competencies in accordance with the requirements of the food production profession, and / or provide an opportunity to plan, organize production processes and conduct research in the relevant food chain (full and / or part-time) at the company and other related organizations.

For example, several students have completed part of their professional practice (Orientation Practice 4CP) at the RTA IF Geotechnology and Eco-Industry Research Center (Food Processing Laboratory), Chemistry, Biology and Biotechnology Research Center (Chemistry Laboratory; Microbiology Laboratory, Sample Preparation Laboratory); RTA EPF Catering Business Training Laboratory, conducting research on the development of new food prototypes.

The methodological instructions contain the goals of the practice of the first level professional higher education study program “Food processing”, tasks, processes, a description of the duties to be performed in the company, requirements for drawing up the practice report (see Appendix 8) (<https://ekursi.rta.lv/>).

The form of part-time studies and the peculiarities of the organization of the practice determine that students work in specific companies and institutions, and, in coordination with the director of the study program, the professional practice shall be based in his / her workplace, if as a result of the professional practice the student will be able to achieve the results of the study program and the results intended for the professional practice. For the planning and successful implementation of the professional practice provided in the study program, a tripartite short-term agreement is concluded between the student, the RTA and the place of practice (see the basic agreements of RTA in Appendix 14), but it also allows practice in other companies upon student's choice. Each trainee has 2 practice supervisors: the practice supervisor in the specific practice place and the practice supervisor from the lecturers involved in the implementation of the study program. The RTA provides full practice documentation (methodological instructions, report) to support the student. The practice supervisor from the RTA helps the student to formulate individual tasks (in product production technology, production organization and planning, product packaging technologies, etc.), coordinates the topic of the qualification paper and individual tasks in special issues, consults students during the practice, provides methodological recommendations for completing the diary and practice reports.

The study program has established a long-term, good cooperation with several Latvian and foreign companies, potential student practice places, for example, SIA Rēzeknes Gaļas kombināts (Rēzekne), SIA "Vlakon"( Viļāni), LPKS "Viļāni", SIA Margret (Jēkapils), SIA Skrīveru saldumi (Skrīveri), Z/S "Kurmīši" (Krāslava), Z/S Liepkalns (Rēzekne Municipality) Z/S "Kotiņi", SIA Utenas pienas, SIA Biržu Dona u.c. (Utena, Lithuania), e.o., to which study tours of students, as well as practices and experience exchange events for lecturers are organized within the study courses of the field (fields of professional activity).

During the professional practice, students obtain the necessary factual material for the development and defense of the qualification paper. After the practice, the student submits a practice report and a diary, which reflects the course of the practice, the fulfillment of the practice tasks, their reflexive assessment by the student and by the practice supervisor in the company. In the end, in accordance with the requirements of the cooperation agreement, the defense of the practice is organized in the jointly established practice defense commission, where each student provides an overview of the work done during the practice, and is evaluated.

Professional practice is an essential part of the SP, which ensures the fulfillment of the study results, goals and tasks set by the SP, is aimed at the development of a qualification paper and certification of the competence of Food Production Specialist in the 1st level professional higher education study level.

### **3.2.5. Evaluation and description of the promotion opportunities and the promotion process provided to the students of the doctoral study programme (if applicable).**

Not applicable.

### **3.2.6. Analysis and assessment of the topics of the final theses of the students, their relevance in the respective field, including the labour market, and the marks of the final theses.**

At the end of the SP, qualification papers are developed on the basis of the Methodological Guidelines for the Development and Defense of Study Research Papers, RTA Common Methodological Guidelines for the Development and Design of Qualification Papers and the 1st Level Professional Higher Education SP "Food processing" available at RTA DVS, division "Studentiem". "Methodological recommendations for study papers, diploma papers, bachelor's papers and master's papers" developed by IF lecturers are available for students on the e-course website (<https://ekursi.rta.lv/>).

The tasks of the qualification paper, in accordance with the methodological regulations, are prepared by the supervisor of the qualification paper and approved by the meeting of the council of the SF "Production and processing". The student chooses the topic of the qualification paper on the basis of the research / professional interest gained in the study courses, continuing the research of the initiated topic in the study project and linking professional practice places or workplace interests in the food industry. For working students, the choice of topic is often determined by the specifics and experience of the practical work.

The topic of the qualification paper is related to the development of a new food product / project, its introduction into production or the development of an existing food chain (full and / or part of the production cycle) production process improvement project. Optionally, this may be, for example, the production of dairy products, processed cereal products, bakery products, meat products, fruit and vegetable products, fish, various beverages or other products in the food chain (full and / or part of the production cycle) company and other related organizations.

Within the framework of the qualification work students plan, organize (full and / or incomplete production cycle) production processes of food chain companies and / or develop new product production technologies or improve existing ones, perform necessary calculations of raw materials, products, auxiliary materials, select appropriate equipment, represent the technological schemes of product production, graphically depict the location of equipment necessary for the production process in the room, developing food company self-control systems, as well as develop measures to promote the product in the market, analyzing competitors. Students also carry out practical researches / experiments, create recipes and / or product / project prototypes, draw conclusions and make suggestions.

During the research period, in the qualification papers "Food Production Specialist", the students and obtainers of the professional qualification analyzed and evaluated current problems in food processing companies, developing improved, innovative solutions to improve the company's assortment or production process, or developing new products for their companies. Evaluating the topics of the qualification papers, it can be concluded that different food chain companies (full and / or part of the production cycle) are represented, which is related to the field of students' interests and the specifics of practical work in the chosen place of practice. Thus, the topics of the developed qualification papers, for example, development of the technology for the production of condensed milk with sugar and coffee, organization of the production process; Organization of quince processing home production processes; Organization of chocolate truffle production processes at SIA "Vlakon" structural unit "Pērtnieku gardumi" "Obelisk Farm" hemp product processing organization, etc., are different.

The overall evaluation of the qualification paper consists of the following criteria: the correspondence of the content of the work to the chosen topic, as well as the novelty of the topic of the work; fulfilment of the set goal and tasks of the work; theoretical guidelines of the topic; novelty of the product or technology used, quality of the technical solution, complexity, economic justification, as well as the ability to draw reasonable conclusions; ability to put forward concrete, feasible and justified proposals; the logic of the project structure and development; language culture; technical design of the work; the materials used in the research and the results of their processing; public speaking skills; ability to defend one's conclusions and proposals; the ability to respond to critical remarks and the ability to defend one's point of view. The average evaluation of qualification papers by study years is the following: academic year 2018/2019 - 7 points; academic year 2019/2020 - 8 points; academic year 2020/2021 - 8 points; which indicates that high-quality projects or new products have been developed, food production companies that have been operating have been established, it is indicative of successful study results and their successful presentation.

The geography of the study program students' production practices in food industry companies confirms the relevance of the study program in the labor market in Latgale, because the final theses, qualification papers (three-year graduation statistics) developed by students in most cases (100%) are related to companies in Latgale, that is closer to place of residence or companies are their working places; these are both larger production companies, such as AS "Preiļu siers", smaller companies, such as SIA "Vlakon", and new companies established by students in Latgale, such as Z / S "Obelisk Farm", PP "Ieva Vugule", SIA Ķragītis, etc. In the process of elaboration of the qualification paper, the wishes of the students in the choice of the scientific supervisor are taken into account, promoting interpersonal communication and as a result increasing the quality of the research work. Before defending the qualification paper in the study direction, a pre-defense of the qualification paper is organized, during which the teaching staff and students of the study field discuss the methodology, structure and content chosen in the qualification paper, literature, and the innovative capacity of the research. Before defending the qualification paper, the pre-defense of the qualification paper is organized by the SF, during which the teaching staff and students of the study field discuss the methodology, structure and content chosen in the qualification paper, literature, and the innovative capacity of the research. The qualification is checked before the defense in the Unified Latvian Anti-Plagiarism System. The SF Council is expected to analyze each case of coincidence. No such cases were detected during the period considered. The defense of the qualification thesis at the RTA takes place in the form of an open session, where the State Qualification Examination Committee and each attendee can ask students questions, there is a discussion with specialists about the problems and their solutions in the field of food processing. The chairman of the examination committee and at least half of the members of the state qualification examination committee are representatives of professional organizations or employers, after the work of the committee discussions are held on the issues of qualification paper, and in the following years the recommendations of employers' representatives are taken into account.

### **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.**

Description of SP resources and provision, information base, material and technical base, compliance with the conditions for the implementation of the study program and achievement of study results can be seen in information given in Criteria 2.3.1-2.3.3 of Section 3, Part II.

**3.3.2. Assessment of the study provision and scientific base support, including the resources provided within the framework of cooperation with other science institutes and higher education institutions (applicable to doctoral study programmes) (if applicable).**

Not applicable.

**3.3.3. Indicate data on the available funding for the corresponding study programme, its funding sources and their use for the development of the study programme. Provide information on the costs per one student within this study programme, indicating the items included in the cost calculation and the percentage distribution of funding between the specified items. The minimum number of students in the study programme in order to ensure the profitability of the study programme (indicating separately the information on each language, type and form of the study programme implementation).**

SP funding sources consist of state budget funding and student tuition fees. The tuition fee is approved by the decision of the RTA Senate for each subsequent academic year.

Costs of the study place of the SP "Food processing" are determined taking into account the basic costs of the study place, the level, duration, form of the study place, as well as the structure of the academic staff and the field of study, i.e., EUR 1 630.11 (basic payment for the study place) \* 1.8 (minimum study cost coefficient) \* 1 (study level coefficient) = EUR 2 934.20.

In total, the annual study costs of one full-time student in the Republic of Latvia or the EU are estimated at EUR 2,934.20, which does not exceed the costs of European countries for the preparation of one student in a similar specialty.

RTA's calculations confirm that the direct costs amount to EUR 2,200.65 per conditional student per year, the indirect costs (expenses for the operation of RTA, including the RTA library, land tax, lease, rent, building maintenance costs, telephone subscription and service costs), utilities, current repairs, special programs, etc.) per 1 conditional student per year is 733.55 EUR, forecasting the number of students in group 10 and more.

The use of financial resources is in accordance with the distribution approved by the Senate. See the available funding of the study program in Table 3.3.3.1.

3.3.3.1.Table

Study program " Food processing" funding

Financial year	2020	2021
Thematic area of the study program: Production and processing		
Minimum study cost coefficient:	1,8	1,8
Study level coefficient:	1	1
Study base costs (euro)	1518,98/1538,98	1630,11
Scholarship amount (euro)	150,82	150,82
Sports, culture, student hostel (euro)	13,52	13,52
Number of study places financed from the state budget	7	20
Financing for the number of study places financed from the state budget	20 373	62 954

Description of the study, informative, including library, material, technical and financial base available in section 2.3.1.

### 3.4. Teaching Staff

**3.4.1. Assessment of the compliance of the qualification of the teaching staff members (academic staff members, visiting professors, visiting associate professors, visiting docents, visiting lecturers, and visiting assistants) involved in the implementation of the study programme with the conditions for the implementation of the study programme and the provisions set out in the respective regulatory enactments. Provide information on how the qualification of the teaching staff members contributes to the achievement of the learning outcomes.**

The selection of teaching staff at the SP takes place in accordance with the RTA academic staff development guidelines, as well as on the basis of the SP's goal, tasks, planned study results and

the principles of a student-centered approach to the RTA study process. The composition of the teaching staff of the SP is designed to provide students with the acquisition of knowledge, skills and research skills in the content of general and branch study courses, achieving the study results specified by the SP, which correspond to the EQF level 5 knowledge, skills and competences specified in the Latvian education classification. The aim of the SP determines two main principles in the selection of lecturers:

1. To provide conditions for high-quality preparation of students in the manufacturing industry (light / textile industry), acquisition of current professional skills, specialists of the branch are attracted to the SP, lecturers with professional experience in specialties corresponding to the profile of the SP;
2. To increase the competence of the teaching staff, to give an opportunity to learn from each other, the model of cooperation of the teaching staff is applied in the study process, teaching the study course together. 10 SP study courses are implemented and evaluated by two or three lecturers. Lecturer teams are formed according to the following two principles: 1) the study course is taught by an experienced practitioner and researcher with practical work experience (e.g., study courses Grain and Grain Production Technology and Equipment, Confectionery Production Technology and Equipment (guest lecturer, GEPC Food Processing Laboratory Engineer S. Gaile, industry practitioners I. Grietiņa, I. Vagele), Food Processes and Equipment (Dr. ing., Prof., Leading researcher Andris Martinovs, industry professional S. Kravčenko, guest lecturer J. Pīgoznis), development of new food products (researcher, lecturer I. Silicka; lecturer, researcher, practitioner I. Dembovska); 2) the study course is taught by lecturers who specialize in one of the thematic sections of the study course and complement each other (study courses Information and Communication Technologies (lecturers J. Musatovs, A. Zorins), Environmental and Civil Protection (E. Šiļiņa, Ē. Teirumnieka), etc.).
3. The planning issues of the RTA academic staff are regulated [RTA development strategy 2016.-2023.](#), [RTA academic staff development plan 2016.-2023.](#) Other issues related to the planning of the academic staff are regulated by [Regulation of academic positions \(Nolikums par akadēmiskajiem amatiem Rēzeknes Tehnoloģiju akadēmijā\)](#), [Regulation for lecturers \(Nolikums par RTA docētāju\)](#), RTA academic staff development plan ([Mācību metodisko izstrādņu un zinātnisko pētījumu plānošanas, uzskaites, kontroles un apmaksas noteikumi](#)), [Procedures for planning and accounting of study work amount of academic staff \(RTA akadēmiskā personāla studiju darba apjoma plānošanas un uzskaites kārtība\)](#), [Procedure for evaluation of work quality of academic staff \(Rēzeknes Tehnoloģiju akadēmijas akadēmiskā personāla darba kvalitātes vērtēšanas kārtība\)](#) and others.

The qualification of the teaching staff complies with the requirements of regulatory enactments. 19 lecturers have a master's degree, 7 lecturers have a doctor's degree, 1 of the lecturers has bachelor's degree in engineering (food industry). 6 of the lecturers are also practitioners with long / sufficient professional work experience, 1 of the lecturers are studying at a doctoral programme. All elected lecturers once during the election period receive professional development courses "Innovations in Higher Education", which is confirmed by a certificate, which in its turn is required by the RTA in the election process as one of the mandatory conditions. Lecturers are provided with both the acquisition of pedagogical courses at higher education institutions (in the amount of 160 hours) and participation in professional seminars in the field, as well as in practice companies, which ensure the appropriate qualification of the teaching staff and help to achieve study results. The research and professional specialization of the teaching staff involved in the implementation of the study program covers all the main areas envisaged in the standard of a food production specialist: starting a business (Ē. Višķers, A. Čerpinska, J. Volkova); introduction to research (S. Martena); Applied Mathematics (A. Vilkaste) laws, regulations and standards (E. Šilina,

I.Dzindzuka), Food Chemistry, Food Packaging Materials and Packaging Technologies, Food Microbiology and Biotechnology (Ē.Teirumnieka, R. Tretjakova, I.Bernāne), Food processes and equipment (A. Martinovs, S. Kravčenko, J.Pīgoznis), Basics of production facilities design (E. Zaicevs). Given that it is a professional study program, it is important that professionals with experience in providing study courses and / or research experience in the field are involved in the provision of study courses. The study courses "Plant Origin Food Production Technologies" and "Animal Origin Food Production Technologies" are taught by Ilze Grietiņa, Inesa Vagele, I.Silicka, Samanta Gaile, Gunta Meikulova, where Inese Vagele is the main food technologist of SIA "Pobeda Confectionery" and Ilze Grietiņa is a food technologist at SIA "Junge". 55% of the employed academic staff are elected to the RTA, i.e., the qualification and compliance with the position criteria has been assessed by the competition commission, taking into account the qualification and education of the academic staff, compliance with the academic and practical work experience developments (teaching aids, programs, etc.), the results of student surveys in the event of re-election.

45% of the academic staff are leading specialists and professionals in the field, guest lecturers. In order to strengthen the SP and link the program to the labor market, industry professionals and lecturers within the framework of ERASMUS + mobility are invited to teach certain topics.

For an overview of the teaching staff employed in the study program see Section 2.3. (see Appendices 9.,10.)

[https://rulv.sharepoint.com/:x/r/\\_layouts/15/Doc.aspx?sourcedoc=%7BD9F9331FA-B8A3-49E5-A378-C3D0A5AC5F9B%7D&file=Doc%C4%93t%C4%81ji\\_virziens\\_RP\\_EN.xlsx&action=default&mobileredirect=true](https://rulv.sharepoint.com/:x/r/_layouts/15/Doc.aspx?sourcedoc=%7BD9F9331FA-B8A3-49E5-A378-C3D0A5AC5F9B%7D&file=Doc%C4%93t%C4%81ji_virziens_RP_EN.xlsx&action=default&mobileredirect=true)

### 3.4.2. Analysis and assessment of the changes to the composition of the teaching staff over the reporting period and their impact on the study quality.

During the reporting period, the composition and competence of the academic staff have improved. Although the proportion of elected academic staff has only slightly increased (50% in 2016, 55% in 2021), the proportion of lecturers with a doctoral degree has also increased from 32% to 40%. If in 2016 1 professor, 2 associate professors, 4 docents and 4 lecturers participated in the implementation of the program, then in 2021 - respectively 3 professors, 1 associate professor, 2 docents and 1 guest docent, 9 lecturers and 11 guest lecturers. Currently, study courses are taught in the study program by industry professionals - 5 guest lecturers.

#### Academic staff of the study program "Food processing"

Lecturer	Academic staff	
	Elected to the RTA (number of)	Visiting staff (number of)
Professor	3	
Associate professor	1	

Assistant professor	2	
Lecturer	9	
Guest assistant professor, guest lecturer		11
In total	15	11

The synergy of pedagogical and scientific work of lecturers can be significantly improved. 14 (56%) of the teaching staff are simultaneously elected to pedagogical and scientific positions. Lecturers elected to academic positions actively participate in scientific conferences and publish in Latvian and international scientific publications, including preparing joint scientific publications with both Latvian and foreign researchers. All the changes that have taken place in the teaching staff indicate the growth and development of the teaching staff of the program. During the reporting period (academic years 2016/2017 - 2020/2021) there have been no significant changes in the teaching staff of the study program, except for the positive fact that new lecturers who have graduated from the RTA master's study programs have joined the teaching staff. 25 lecturers are involved in the implementation of the SP, 14 or 56% of which are elected at the RTA, 11 or 44% are visiting docents. The sufficiently high proportion of elected academic staff ensures the availability of regular lectures and lecturers for students throughout the study process. SP employs 2 professors, 1 associate professors, 2 docents, 9 lecturers, 1 guest assistant professor 11 guest lecturers; 5 of the teaching staff are leading researchers and 5 researchers, 1 research assistant, 6 lecturers have a doctoral degree. For summaries of the teaching staff involved in the SP, see Appendix 9 in the SF self-assessment.

To ensure the coherence of the study program with the current tendencies and problems of the labor market, the professional program employs professionals with extensive professional work experience: study courses are taught by Inese Vagele, chief food technologist of SIA "Pobeda Confectionery"; food technologist, quality specialist Ilze Grietiņa SIA "Junge" teaches the study course "Plant Origin Food Production Technologies" with other RTA lecturers; Sergejs Kravčenko, Technical Director of SIA "Cryogenic and vacuum systems" (deals with scientific and technical development of the company, development of new food processing technologies, development of new products) teaches the study course "Food Processes and Equipment", guest lecturer and practitioner Ināra Dzindzuka, FVS Inspector, teaches the study course "Food Quality Management and Ensuring", Senior Labor Protection Specialist E.Šiljina "Labor Protection" and "Environmental and Civil Protection", etc..

Significant attention is also paid to the English language skills of lecturers. The teaching staff involved in the implementation of the program with B2 level systematically increases the English language competence by acquiring English language in courses offered by RTA or by some projects. Several lecturers employed in the study program have previous experience in working with foreign students.

6 lecturers or 44% of the academic staff involved in the study program work in the RTA project "Strengthening of the RTA academic staff in the fields of study "Mechanics and metalworking, heat energy, heat engineering and mechanical engineering" and "Management, administration and real estate management"". By participation in the project lecturers improve digital and professional English language skills, develop leadership and cooperation competencies, learn the content of the English language course using various digital tools, online platforms, etc. Training involves various

learning forms, which promote the development of leadership and cooperation skills (problem situations, initiative, planning of joint actions, etc.), which is further used in the teaching of study courses. In December 2019, the lecturers involved in the project “Strengthening the RTA academic staff in the fields of study “Mechanics and metalworking, heat energy, heat engineering and mechanical engineering” and “Management, administration and real estate management” started professional practices with a merchant according to the field of study courses.

The provision of the study program has been supported for several years by cooperation partners abroad, they are guest lecturers from Kaunas, Kaunas University of Applied Sciences (KUAS), which improves students new product development skills by implementing Blended Intensive programs (BIP), it also develops students research skills (theme of the program approved in the academic year 2021/2022: Blended Intensive program “Principles of sustainable food production, including only local products of the region” (3ECT)), as well as it creates an international environment in everyday life, which may promote the involvement of students in the Erasmus + mobility project in the future.

During the reporting period, foreign guest lecturers and industry professionals from Lithuania and Bulgaria have been attracted. The attraction of guest lecturers is regular, they are lecturers from Kaunas every year (Kaunas University of Applied Sciences (KUAS) I. Kraujutiene, N. Vasilauskiene etc., (Utena University of Applied Sciences (UAS), Lithuania), Prof. Ļ. Lazovs (Bulgaria) etc. In total, there are 10 of them who have shared their experience in the production technology of extruded products, and a joint custom research has been carried out to develop new lyophilized food products for SIA Nature Line, where students were actively involved in the research, etc. learning topics.

RTA carries out commissioned research, where 2<sup>nd</sup> year students of the study program “Food Processing” are actively involved and problem-based learning approach (PBL) is used here, purposefully balancing the acquisition of theory in the content of study courses in the field (professional field) solving topical practical tasks. During the academic year 2022/2023 it is planned to acquire this learning method in one of the study courses “Planning and organization of production processes of food chain enterprises” in the amount of 3 CP (4<sup>th</sup> semester). PBL contains the acquisition of new knowledge, intensive (including interdisciplinary) group cooperation and communication with various parties involved in solving the problem. PBL allows students to develop competencies such as innovative thinking, self-assessment, the ability to work with information, independent learning in a team environment. The PBL method used in the professional specialization study courses and the structure of the content and work organization of the corresponding study courses are able to promote and ensure the implementation of the study results of the study program.

**3.4.3. Information on the number of the scientific publications of the academic staff members, involved in the implementation of doctoral study programme, as published during the reporting period by listing the most significant publications published in Scopus or WoS CC indexed journals. As for the social sciences, humanitarian sciences, and the science of art, the scientific publications published in ERIH+ indexed journals or peer-reviewed monographs may be additionally specified. Information on the teaching staff included in the database of experts of the Latvian Council of Science in the relevant field of science (total number, name of the lecturer, field of science in which the teaching staff has the status of an expert and expiration date of the Latvian Council of Science expert) (if applicable).**

Not applicable.

**3.4.4. Information on the participation of the academic staff, involved in the implementation of the doctoral study programme, in scientific projects as project managers or prime contractors/ subproject managers/ leading researchers by specifying the name of the relevant project, as well as the source and the amount of the funding. Provide information on the reporting period (if applicable).**

Not applicable.

**3.4.5. Assessment of the cooperation between the teaching staff members by specifying the mechanisms used to promote the cooperation and ensure the interrelation between the study programme and study courses/ modules. Specify also the proportion of the number of the students and the teaching staff within the study programme (at the moment of the submission of the Self-Assessment Report).**

The models of cooperation of the teaching staff employed in the program basically correspond to the self-assessment common to the whole SF. The co-operation of the teaching staff of the SP is presented by several aspects of the co-operation characteristic of the specifics of the RTA activity:

1. **interdisciplinary cooperation of the academic staff** - the teaching staff of different fields is employed in the program, who, when meeting at the general meetings of the SF, can discuss topical issues in achieving study results, using study methods, and evaluating study results. SP has a productive cooperation with SF "Mechanics and Metalworking, Heat Power Engineering, Heat Engineering and Mechanical Engineering" and "Management, Administration and Real Estate Management". Lecturers carry out joint projects and participate in the implementation of study courses, for example, the study course "Development of new food products" has been taught by I.Silicka, I.Dembovska.
2. **joint scientific activity of the academic staff** - joint scientific publications are both interdisciplinary and developed in related fields, for instance, use of lyophilization (drying method) in the development of new hiking food products and market research, development of extruded field bean meal products, experience in the implementation of cooperation projects, etc. The study field "Management, administration and real estate management" and "Mechanics and metalworking, heat energy, heat engineering and mechanical engineering" have a particularly productive cooperation with the study program. Lecturers conduct joint researches, participate in the implementation of the RTA scientific grant projects, prepare publications, participate in conferences, conduct custom researches.
3. **cooperation of elected academic staff - visiting lecturers** can be assessed as successful, because the elected academic staff forms the academic core of the SP, which is supplemented by guest lecturers. RTA has identified a number of tasks related to the pedagogical and methodological support of guest lecturers, especially when starting

academic activities for new lecturers. For this purpose, RTA offers free in-service training courses that guest lecturers can use. The study program includes study courses, which are taught by several lecturers and where there are mutually agreed topics, the mechanism of evaluation of study results, there is direct cooperation in the implementation of study courses (for instance, study courses Grain and grain products production technology and equipment, Confectionery production technology and equipment (guest lecturer, GEPC Food Processing Laboratory engineer S. Gaile, industry practitioners guest lecturers I. Grietiņa, I. Vagele), Food processes and equipment (Dr. ing., prof., leading researcher Andris Martinovs, industry professional S. Kravčenko, guest lecturer J. Pigoznis), study course Environmental and Civil Protection” is taught by Ē .Teirumnieka, E.Šilina.

4. **Cooperation between teaching staff and support staff.** Cooperation between teachers and ICT specialists, ensuring distance learning during the pandemic, cooperation between teachers and general staff is especially important for the implementation and development of SP. RTA has set up its own internal document management system (DMS), which also contains the possibilities for planning and controlling cooperation. Most collaboration models during the state of emergency at the RTA are provided by the *Microsoft Teams* platform.
5. **cooperation between lecturers and students.** In March, April 2020, due to the Covid-19 pandemic, a state of emergency was established in Latvia, which determined the priority of new cooperation models. The study process at RTA was implemented remotely, using all possible remote communication tools. The dominant communication portal of RTA was the study course website [ekursi.rta.lv](http://ekursi.rta.lv), as well as the online tools *Microsoft Teams*, *Zoom*, *WhatsUp*, *Skype*, etc. At the time of submitting the self-assessment report, RTA has developed a procedure for the implementation of distance learning and the evaluation of the first distance learning stage is being carried out.
6. **cooperation of professionals in the field with those lecturers, for whom the Academy is the main place of work.** The SP "Food processing" is implemented in several directions: Cooperation between the RTA professional internship supervisor and the company's professional internship supervisor during the student's professional practice; participation in the work of the state qualification examination committee; research collaboration, participating in projects, presenting research results, co-operation in the process of raising the pedagogical qualification, jointly attending the events of the RTA professional development program “Higher education didactics” or “Innovations in higher education”, as well as discussing topical issues of the study process. At the time of submitting the self-assessment report, the ratio of the number of teaching staff and students in the study program is 14, which is formed by dividing the number of students in the PLE program (14) by the number of teaching staff in PLE (1), full-time students are taken into account for the calculation of this indicator. The ratio of teaching staff to students in the program is slightly lower than the Latvian average in short-cycle programs (13) and the OECD average (15)<sup>1</sup>.

<sup>[1]</sup> 1 EDUCATION AT A GLANCE 2021 © OECD 2021. Available: <https://ieej.lv/gHSYU>,

## 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 1.zip	1.pielikums.7z
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 2.docx	2.pielikums.docx
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 3(2).docx	3.pielikums(2).docx
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 4-1.docx	4.pielikums-3.docx
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)		
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	Annex 5.xls	5.pielikums.xls
The curriculum of the study programme (for each type and form of the implementation of the study programme)	Annex 6.docx	6.pielikums.docx
Descriptions of the study courses/ modules	Annex 7.docx	7.pielikums.docx
Description of the organisation of the internship of the students (if applicable)	Annex 8.docx	8.pielikums.docx
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)		