APPLICATION

Study field "Manufacture and Processing" for assessment

Study field	*Manufacture and Processing*
Title of the higher education institution	*Rīgas Tehniskās universitātes aģentūra "Rīgas Tehniskās universitātes Olaines Tehnoloģiju koledža"*
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Self-evaluation report

Study field "Manufacture and Processing"

Mechanics and Technology College of Olaine

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1. Information on the Higher Education Institution/College

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

Brief description of the university/college. Riga Technical University Agency “Riga Technical University Olaine Technology College” (hereinafter - OTC) is a state-accredited professional higher education institution with a structural unit secondary vocational school. OTC is the only vocational education institution in Latvia that prepares specialists with the third and fourth professional qualification levels in the fields of chemistry, pharmacy, biotechnology and the environment.

The college was founded in 1964. It is located in Olaine - a city of chemists with industrial values, a tidy, business-friendly environment in terms of the specialties offered by the educational institution, and a rich cultural heritage in the development of the chemical industry, where young professionals can find employment, education and leisure opportunities.

On July 1, 2019, implementing the process of consolidation of higher education, Olaine College of Mechanics and Technology (OMTK) has officially become an agency of Riga Technical University. College as an Agency was added to RTU in accordance with the decision of the Cabinet of Ministers of November 21, 2018. Its new name is Riga Technical University Agency “Riga Technical University Olaine Technology College”. The decision on cooperation between RTU and OTC was made on a basis of the need to promote the concentration of resources and greater synergy between Latvian higher education institutions that implement study programs in one field. The decision on closer cooperation was made by both the OMTK Science Council and the RTU Senate.

OTC is a modern institution of professional higher and vocational secondary education based on knowledge and quality. The legal basis of the College's activities is the Law on Education, the Law on Higher Education Institutions, the Law on Vocational Education, with the RTU Senate decision on 27 May 2019 meeting (Minutes No. 630) approved Regulation of the Olaine Technology College of Riga Technical University and other regulatory enactments.

OTC mission and vision.

OTC mission: To prepare professional, high level specialists of chemistry, pharmacy, biotechnology, environment, food and their related industries in sustainable and qualitative educational process in modern tehnology environment education programs with high added value.

OTC vision: Excellence of the educational institution by targeted institutional development until reached a level appropriate to the center of excellence, implementing a sustainable supply of educational services.

Implemented study field and number of study programs in them. All study programs are implemented in person in Latvian.

OTC implements 1st level professional higher education study programs: “Biotechnology” with qualification “Biotechnologist”, program code 41524, which is accredited until April 10, 2023, “Environmental protection technology” with qualification “Environmental specialist”, programs code 41850, which is accredited until December 31, 2023, and the program “Food Quality Control” with the qualification “Food Quality Specialist” program code 41541, the expiration date of which is December 31, 2022. The duration of studies for the study programs “Biotechnology” and “Environmental Protection Technology” is 2.5 years, but for the study program “Food Quality

Control" - 2 years.

Dynamics of the number of students in the higher education institution / college during the evaluation period. According to the Official Statistics Portal

"Number of students and academic staff (full-time) in higher education institutions and colleges", in OTC in the period from the 2013/2014 academic year to the 2020/2021 academic year, a sharp decline in students has been observed.

In study year 2013/2014 the number of students is by 41.6% higher than in study year 2018/2019. In turn, from study year 2021/2022 in the academic year there is a positive tendency to increase the number of students compared to study year 2019/2020.

The dynamics of the total number of students during the accreditation period is shown in Figure 1.

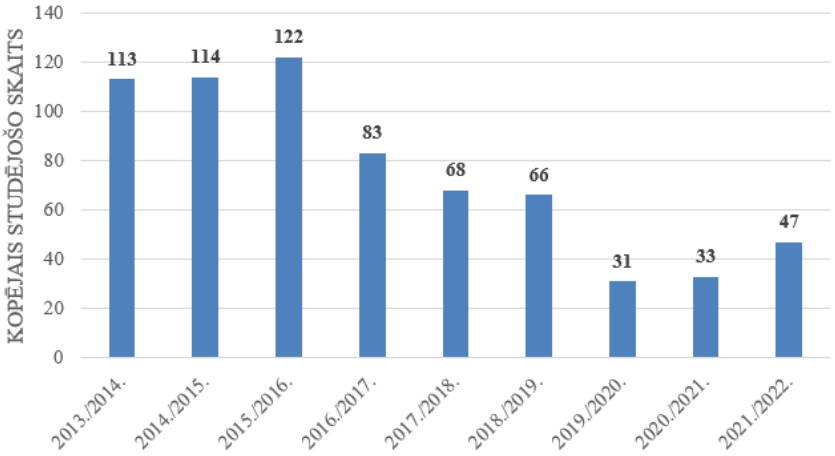

Figure 1. Dynamics of the total number of students during the accreditation period.

College development strategy. In developing its strategy, in 2021 the OTC has identified six strategic development directions for the period until 2027.

OTC raised priorities:

1. Development of a new offer of educational programs
2. Provision of human resources
3. Provision of practice places
4. Increase in the number of learners
5. Application of infrastructure and Technologies
6. High efficiency of economic activity

OTC strategical goals and tasks are a basis for further development and preparation of investment projects, attracting state of Latvia, European Union structural funds or other financial instruments.

1st priority: **Development of a new offer of educational programs.**

Goals:

1. Update and modernize existing educational programs promoting closer involvment of companies in the sector;
2. Develop new, modular educational programs that meet the requirements of the labor market;
3. Motivate self-education for life.

2nd priority: **Provision of human resources.**

Goals:

1. Attract highly qualified human resources;
2. Implement a common personnel policy;
3. Motivate and ensure staff growth opportunities;
4. Targetfully assess qualification and competences of employees by planning of their professional growth.

3rd priority: **Provision of practice places.**

Goals:

1. Cooperate with representatives of employers by coordinating traineeships;
2. In cooperation with food, chemistry and their related industries, metalworking, machine building and mechanical engineering industry and leading companies to provide internships for learners and high quality of practical training;
3. Encourage international exchange of experience within projects (Erasmus+, PoVE-Water etc.).

4th priority: **Increase in the number of learners**.

Goals:

1. Create a positive image of institution, field of natural sciences and industry;
2. Improve the implemented OTC educational offer in modern infrastructure;
3. Popularize graduate success stories by giving an idea of future opportunities in the industry;
4. Individual approach to each learner for minimization of early school and studies leaving of learners;
5. Encourage parental responsibility in the process of obtaining education in a vocational secondary school.

5th priority: **Application of infrastructure and technologies.**

Goals:

1. Make meaningful use of new, modern infrastructure and technologies and develop their interdisciplinary application;
2. Promote the improvement of practical scientific activity;
3. Identify potential growth opportunities and future perspectives by taking into account basic principles of “green course”;
4. Improve IT applications and work on digitalization.

6th priority: **High efficiency of economic activity.**

Goals:

1. Resource effectively and sustainable optimize economic functions performed by the institution;
2. Improve the management of financial and administrative activities;
3. In cooperation with founder organize procurement of services necessary for ensuring operation of institution.

Results to be achieved in implementing the objectives:

1. accreditation of study fields for the maximum term;
2. high level of competence and involvement of employees;
3. a stable increase in the number of transnational and local cooperation projects and partners (including the mobilization of the ESF and other funding);
4. increase in the number of students by an average of 10% per study year.

Electronic link to the website where the development strategy is available in both Latvian and English https://otk.rtu.lv/normativie-dokumenti/

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.

The governance structure and division of functions of the OTC are formed by the processes for ensuring the strategic management, operational functions and support functions of the College. An outline of the College's governance is attached in *Annex 2* to this report.

The OTK Council consists of 11 council members.

1 or 9% founder representative

4 or 37% lecturers

2 or 18% of the general staff

2 or 18% representatives of students self-government

2 or 18% representatives of employers and non-governmental organizations

The structure of the OTC consists of the College Council, the Director of the educational institution, the Deputy Director, the Study Division, the Head of the Laboratory, the Student Self-Government, the Director of Study Programs, academic staff and guest lecturers, as well as the Library, Archives, Accounting, Recordkeeping and Economy Division.

The implementation of the first level professional higher education study program “Food Quality Control” is coordinated by the program director. The following structural units are involved in ensuring the study process:

Study division that plans the study process (lesson planning, lecturers' work, etc.) and lists the progress; responsible for software and technical means; provides students with information; offers students and lecturers to get involved in both college and Latvian and international projects, etc. The director of the study program is responsible for ensuring the fulfillment of the content of the study program, self-evaluation.

The academic staff performs teaching, methodological and scientific work, gives lectures within the study work, conducts seminars and practical classes, accepts examinations, reports, regular work (incl. Tests, etc.), organizes consultations, conducts and reviews qualification work, performs other work duties. related to the organization of study work.

Lecturers involved in the accredited program have the necessary skills to transfer their knowledge and experience to students and receive feedback on their work. All lecturers are

provided with the opportunity to supplement their knowledge, participate in in-service training courses, study for a doctorate, develop scientific work and go abroad for an internship within the framework of exchange programs.

In ensuring the implementation of the study program, 18 % of all lecturers have a doctoral degree, 6 % study for a doctorate, 82 % have a master's degree.

Economy division that deals with material and technical support issues.

A library that provides students and lecturers with information.

Record keeping keep records of employees; introduces labor protection requirements; organizes the sending of employees for qualification improvement and training, etc.

The director of the college ensures the content and financial activities of the college, the deputy director ensures the management and course of the study process in the study and research work, as well as coordinates the issues of international relations and projects.

The Council is the highest representative and governing body and decision-making body for education and research. The council consists of the academic and administrative staff of the college, representatives of the founder and employers, as well as representatives of the students' self-government. The Council is chaired by the President of the Council. The college implements three study programs, currently has one director.

The task of the student`s self-government is to promote the formation of the social life of college students and to promote the efficiency of their study process.

In order to promote the efficiency of the study process, scientific conferences are organized that attract college students.

For several years now, the most active students of the college have had the opportunity to represent the college at the international educational exhibition "School". It is a great opportunity to share your experience with others, provide information about your college and at the same time promote your specialty.

Since July 1 2019, when OTC became an RTU agency, the cooperation between the two higher education institutions has become much closer and more productive. OTC has the opportunity to participate in various teaching, research and project activities, thus greatly expanding its horizons. There is a logical and simpler succession for students to study in college and then start RTU not from the first, but further courses. The saving of resources, as well as the increase in the number of students in recent years, should definitely be mentioned as a positive moment.

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.

1. The quality policy OTC is focused on the implementation of OTC's mission, sustainable development and achievement of strategic goals - studies, research, infrastructure, organizational excellence and recognition.

2. The OTC quality system is based on Standards and Guidelines for Quality Assurance in the European Higher Education Area.

3. The sustainable development of OTC is based on the OTC Excellence approach, which ensures the planning, implementation, testing, evaluation of results and their further development.

4. Quality policy forms the framework for the implementation of the OTC strategy, the development and improvement of the study process, research and organization:

- Development of OTC organizational culture based on the integration of studies, research and organizational management processes;

- Increasing and improving the knowledge, skills and competencies of OTC staff;

- Development and improvement of the quality management system, regularly evaluating the wishes and satisfaction of students, as well as other customers and stakeholders;

- Responsibility of managers for the implementation of internal quality assurance procedures and processes in the structural units;

- Efficient and effective use of resources based on regular analysis of OTC processes, activities, results of their evaluation and management reports;

- Participation of OTC staff (including students) in quality assurance, encouraging them to get involved in improving the quality management system.

5. OTC identifies and provides the resources needed to establish, implement, maintain and continuously improve the quality management system.

6. OTC uses a risk-based approach to identify factors that may cause deviations from processes and the intended performance of processes.

7. OTC uses preventive management tools and methods to mitigate negative impacts and seize opportunities.

8. OTC quality policy and its implementation is based on the following basic principles:

- Acting in the interests of the country's sustainable development - OTC works to help achieve the goals of the EU's single educational space, society, employers, students, graduates and other stakeholders;

- Leadership and unity in achieving the goal - OTC management promotes the unity and cohesion of the staff in terms of the intended goals and strategic management; it creates an environment in which employees purposefully integrate into the successful achievement of the goals of the OTC;

- Systematic and process-oriented approach - clear sequence of processes and their interaction, as well as criteria and methods for efficient process operation and management;

- Continuous, developmental improvement - changes that are necessary to increase the value of processes, systems and achievements and to optimize the work of the college in a changing environment can be identified and implemented in accordance with priorities;

- Evidence-based approach to decision-making - effective decisions based on objective data obtained, information analysis and monitoring;

- Cooperation with partners - professional associations, student organizations, other higher education institutions, companies and organizations, etc.;

- Staff involvement and competence - all OTC staff (including students) participate in the development of the quality system and policy implementation;

- Process analysis and management - OTC operation and use of resources is considered and managed as a set of processes to achieve the desired result more effectively;

- Addressing risks and opportunities - OTC management considers the external and internal circumstances that affect its processes and strategic direction in identifying risks and opportunities and how to deal with them.

9. The quality policy is implemented in all structural units of the OTC in accordance with the internal regulatory enactments of the OTC.

see https://otk.rtu.lv/wp-content/uploads/sites/29/2022/04/KVALITATES-POLITIKA.pdf "RĪGAS TEHNISKĀS UNIVERSITATES OLAINES TEHNOLOĢIJU KOLEDŽAS KVALITĀTES POLITIKA". The regulations attached to the website are available in Latvian.

At the end of each study semester, student surveys are conducted on various aspects of the study process quality, content, everyday life, etc. issues. Many of the recommendations and suggestions are taken into account and later implemented in the learning process.

The academic staff and the administration regularly communicate with each other with students, who have the opportunity to turn to the OTC administration and teaching staff at any time with any painful issues.

Cooperation with companies in the sector, in turn, takes place most regularly in the provision of internships for students. Representatives of companies in the sector also participate in the evaluation commissions of students' final examinations. There is an opportunity and it is often used - for teaching staff to conduct their classes with students in the form of an off-site seminar in one of the companies in the industry.

Cooperation with RTU also takes place relatively regularly. RTU Vice-Rector for Studies is a member of the College Council and also the closest contact person for any issues, especially those related to the study process. In matters of quality management process, OTC cooperates with the management of RTU Quality Management and Risk Management Department. Also, within the scope of its competence, OTC employees have close cooperation with the relevant RTU officials in the areas of personnel management, finance and accounting, libraries, projects, laboratories, economic and other fields.

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.	see 1.3.

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.	The development of OTC study programs, supervision of activities and periodic inspection are performed by program directors and methodological commissions, which are responsible for methodological work and its development in the institution. The College's new Development and Investment Strategy for 2021-2027 states that in OTC the 1st level professional higher education methodological work is done by program directors and three methodological commissions are working: methodological commission of general education subjects, methodological commission of professional subjects and methodological commission of upbringing work. Work goals of methodological commissions are: 1. To rise the quality and effectiveness of learning process; 2. To provide the necessary support to teaching staff for education process implementation; 3. To promote comprehensive development of learners and formation of a creative personality; 4. To promote learners creative work, research, motivation, participation in the implementation of the educational process. Work tasks of methodological commissions are: 1. To implement the achievable results specified in the professional standard; 2. To ensure interdisciplinary connection between general and professional education subjects; 3. To promote and support creative activity and professional development of teachers; 4. To analyse achievements of OTC students in learning/study work, causes of underachievement, as well as the results of the work of the teaching staff; 5. To motivate learners to improve by developing skills to learn/study and inquire about processes in OTC, society and world; 6. By cooperating with industry members evaluate each qualification and determine the optimal scope of practice and duration of the acquisition of qualification.

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.	see https://otk.rtu.lv/nolikums/ "Studiju un pārbaudījumu nolikums". The regulations attached to the website are available in Latvian. Each study course has a description of the study course evaluation criteria, see the appendix "Study courses".
4.	Internal procedures and mechanisms for assuring the qualifications of the academic staff and the work quality have been developed.	see 3.4.1.
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.	At the end of each study semester, student surveys are conducted on various aspects of the study process quality, content, everyday life, etc. issues. Many of the recommendations and suggestions are taken into account and later implemented in the learning process. The annual report is prepared and approved at the council meeting. The annual report of the college provides information about the college, the structure of the administration, and details the number of students and staff. External users also have the opportunity to get acquainted with the distribution and use of the state budget, revenue from economic activities, own resources and use. Detailed information on international relations is provided. The report is available on the OTC website in Latvian https://otk.rtu.lv/koledzas-pasnovertejums/
6.	The higher education institution/ college shall ensure continuous improvement, development, and efficient performance of the study field whilst implementing their quality assurance systems.	see 2.2.2.

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 strategic goal of the study field fully corresponds to the strategic goals of the college, i.e. to offer a high quality of studies, to ensure that the theoretical knowledge acquired in the study program is most effectively related to practice, etc.

The main goal of the OTC is to provide opportunities for professional higher education. The development strategy of the study field is related to the OTC strategy - to prepare high-level specialists for Latvian companies. OTC's vision is to become a center of excellence. OTC is the only educational institution in Latvia that implements the 1st level professional higher education study program "Food Quality Control" included in this field of study. This study program prepares qualified food control specialists in Latvia.

OTC implements the 1st level professional higher education study program "Food Quality Control" in the study field "Production and Processing".

In order to prepare knowledgeable food quality specialists, new specialized courses on new types of food have been developed and introduced, incl. genetically modified food, as well as food additives and nutrition. In order to increase the professional training of college graduates, it is planned to establish closer cooperation with employers in order to provide versatile internship opportunities.

The Latvian state has developed laws to ensure the circulation of quality food that is safe for human health, life and the environment, preventing risks and protecting the interests of consumers. Food quality and control requirements are regulated by European Union regulations. In order to ensure the circulation of quality food, specialists with a great sense of responsibility, knowledge and skills in the field of food chemistry are needed, such specialists are trained in OTC.

The study program "Food Product Quality Control" complies with the 1st level professional higher education standard and the demand of the labor market.

The study program has been developed taking into account the demand for food quality specialists in food production companies and food quality control laboratories. The program is in line with labor market demand, as many food businesses already lack knowledgeable food quality control specialists. Demand for food professionals could only increase as EU directives and standards impose ever stricter requirements on food production and control. In order to implement them, specialists are needed who are familiar with food production processes, modern methods of analysis, and quality management and legislation.

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 study field was performed by the head of the study division in cooperation with the program director in 2021, gathering opinions from all interested parties: students (opinions obtained through questionnaires), lecturers (opinions obtained during individual

negotiations), OTC management and staff (opinions obtained during individual negotiations), employers 'representatives (opinions obtained through individual negotiations with employers' representatives), graduates (opinions obtained from a survey of graduates by telephone).

The results of the SWOT analysis performed in 2021 are shown in Table 1.

Table 1

SWOT analysis of the study field

INTERNAL FACTORS	
STRENGTHS	WEAKNESSES
- Most students are satisfied with the quality of studies. - Professional teachers who regularly improve their professional knowledge. - Specialists of the field (academic staff and practitioners) are involved in the study process. - Regularly is insured updating of the study program and the content of resources. - Provision with modern laboratories and technologies. - Aesthetic study environment. - A service hotel for students is available next to the educational institution. - Individual approach to each student. - Provision of internships. - Teachers and student research conference is organized. - The only higher education institution in Latvia that implements such an accredited 1st level professional higher education program.	- Improve international cooperation. - Insufficient publicity of students' research works. - Insufficient access to databases of scientific articles. - Improve cooperation with employers. - Improve contact with graduates. - Insufficient knowledge of foreign languages for students and academic staff. - Large differences in the age and level of education of students make it difficult to acquire the content of study courses in the first semester, especially in general education courses. - Insufficient involvement of teachers and students in mobility programs.
EXTERNAL FACTORS	
OPPORTUNITIES	THREATS

- Extensive development opportunities for study field programs. - Study places financed from the state budget. - Qualified specialists are trained in demanded industries in Latvia and in the world. - Opportunities to improve and expand cooperation with foreign higher education institutions. - Opportunity to involve employers' representatives more in the study process and its improvement. - Opportunity to make more extensive use of social networking solutions to attract students. - Opportunity to take full advantage of international cooperation through active participation in the ERASMUS + program.	- Demographic situation - as the population declines, so does the number of potential students. - Due to global competition or the country's economic development, there may be unforeseen changes in the structure of economic sectors and the corresponding demand in the labor market for qualified specialists. - It is possible to create similar study programs in other higher education institutions and colleges, creating competition between HEIs and, consequently, a decrease in the number of students in certain programs. - Problems in attracting highly qualified lecturers for the implementation of study courses in the field, unable to offer competitive remuneration. - The low prestige in Latvia for the 1st level professional higher education. - OTC may not receive the state budget funding necessary for the provision and development of the study process.

The following measures are planned and implemented to address weaknesses, avoid threats and seize opportunities:

1. The College participates in the work of the Association of Colleges in order to influence the education policy in Latvia;

2. The publicity of the college scientific conference is being worked on;

3. The library is supplemented with the latest books, subscription options for new databases are being worked on;

4. There is regular co-operation with employers, co-operation with the relevant NEP should be intensified;

5. After the mitigation of the consequences of the Covid 19 pandemic, the international cooperation of the academic staff should be renewed and the involvement of students in international activities should be promoted, incl. greater use must be made of mobility opportunities.

The development plan of the study field “Production and Processing” is included in the strategy of the study field “Production and Processing” of the OTC 2021-2027. year. The management and teaching staff of the OTC were involved in the development of the plan, thus ensuring that the strategy takes into account the needs of all stakeholders. The main strategic goals are the continuous improvement of the quality of the study content and the improvement of the study content, the promotion of cooperation with employers and the development of international cooperation in order to improve the competitiveness of the study field.

2.1.3. The structure of the management of the study field and the relevant study

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

Management structure in Annex no. 2.

Several persons and institutions are involved in the management of the study field, the main responsibilities of which are stipulated in the table (see the appendix). The job descriptions indicate the subordination of each person's position, the positions of subordinate employees, the main job responsibilities, responsibilities and rights. The division of responsibilities allows to ensure purposeful development of the study field and the existing study programs in accordance with the OTC "Development and Investment Strategy for 2021-2027"

The college operates in accordance with the regulations of the OTC. The director of the college, together with the deputy study and research work, ensures the study process of the college, as well as the administrative and economic management. The College Council is the highest representative and governing body and decision-making body for education and research. The council consists of the academic and administrative staff of the college, representatives of students, employers and the founder. The Council is chaired by the President of the Council.

The main task of the management of the study field and the corresponding study program is to ensure high-quality study content in accordance with the regulatory enactments of the Republic of Latvia and a convenient study process that is understandable and accessible to students and teaching staff. The management process is organized providing two functions: substantive, methodological management and administrative management. Roles and responsibilities for the implementation of these functions have been delegated to the relevant departments and their staff.

Administrative meetings are held for the exchange of information and timely decision-making, as well as electronic means of communication are used. Issues regarding the organization of the study process (incl. Study methods), quality assurance (incl. Discussion of survey results), etc. are considered at the meetings of the administration. The efficiency of management is also promoted by a unified procedure in the study organization in all study fields and study programs, unified document samples and the availability of information on ongoing processes and current events. All the main activities at the college are planned before the new study year, preparing the study calendar, practice schedules, final work development schedules and the annual activity plan. One study program is implemented in the field, therefore the head of the field also performs the duties of the program director. The head of the field cooperates with the teaching staff, evaluating the strengths and weaknesses of the study field, planning the implementation of the study programs, reviewing the content of the study programs, etc.

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 requirements for starting students are determined in accordance with the procedures specified in the state legislation, in accordance with Articles 46 and 47 of the Law on Higher Education Institutions, as well as the regulations of the Cabinet of Ministers of the Republic of Latvia of October 10, 2006 No. 846 “On Requirements, Criteria and Procedures for Admission to Study Programs”. Admission to the study program is regulated by the OTC “Regulations on the Admission Procedure for Learners”. The study programs included in the study field can be acquired in the form of full-time (full-time) studies.

Selection criteria for applicants:

- secondary or secondary vocational education document - diploma or certificate of acquisition of education and transcript of records;

- certificates of centralized examinations (hereinafter “CE”) in Latvian, foreign language and mathematics.

When registering for undergraduate studies, in accordance with Article 46 (3) of the Law on Higher Education Institutions of the Republic of Latvia, CE certificates are not taken into account in the following cases:

- persons who have completed secondary education before 2004;

- persons who have received education abroad;

- for persons with special needs, by submitting a confirmatory document on exemption from CE, on the basis of Cabinet Regulation no. 112 of 11.03.2003, “Procedures for Exempting Learners from the State Examinations”. In these cases, the CE requirements are replaced by corresponding assessment mark of each subject from the graduation certificate.

At the beginning of the study process, after matriculation, students are offered introductory lectures, in which they are introduced to the college, its internal regulations, organization, material and technical base and the study process. In these introductory lectures, students and their range of interests are introduced, and mutual cooperation between students, faculty and staff is encouraged.

Application for studies in the later stages of studies takes place in accordance with Article 47 of the Law on Higher Education Institutions, Cabinet of Ministers 16.11.2004 Regulation No. 932 “Procedure for starting studies in the later stages of studies”.

Studies in later study stages of OTC can be started:

1. transferring from another higher education institution;

2. transferring to another study program OTC;

3. resuming studies at OTC after a break.

Recognition of study courses acquired in other higher education institutions is regulated by the Regulations of the OTC “Riga Technical University Agency“ Riga Technical University Olaine Technology College ”on recognition of competencies acquired outside formal education or professional experience and study results achieved in previous education” (approved at the OTC Council meeting on 16 June 2021). OTC study programs may recognize courses successfully completed in accredited or state-recognized Latvian or foreign higher education institutions, except for the final examinations of the study program; courses of continuing education programs, if credit points are credited for the acquisition of the course in the Latvian higher education credit point or

ECTS system study courses. Recognized study courses are included in the academic obligations fulfilled by the student, replacing the study courses of the compulsory (A) part, limited choice (B) part or free choice (C) part of the study program.

For applicants who start their studies at a later stage of studies, the recognition procedure is performed before matriculation. Study courses are not recognized if the content or scope of these courses or the knowledge and skills acquired do not meet the requirements of the program. One course of the OTC study program may be replaced by several acquired study courses and vice versa - the study courses of the OTC may be replaced by one acquired study course. When replacing an OTC study course with one or more courses, the total amount of these courses must be equal to or greater than the amount of the OTC study course.

Recognition of study courses takes place upon receipt of the student's application at the Study Division of the OTC. The applicant shall also attach to the application an academic certificate issued by the higher education institution. An academic transcript (original) with the signature of the relevant official and the seal of the educational institution is accepted for examination. Students who transfer to OTC from higher education institutions of other countries must submit a translation of the academic transcript of the respective higher education institution, which has been approved by the Academic Education Center (Latvian ENIC/NARIC). The study division submits the applicant's application and appendices for review to the Study Results Recognition Commission. The Commission for Recognition of Study Results, using the valid study program plan, makes a decision on the academic recognition of study courses. The head of the study division issues an order on the recognition of study courses.

2021/2022 there were no applications

2020/2021 3 applications

The procedure for the recognition of knowledge, skills and competences acquired outside the study programs is determined by the Regulations “On the Recognition of Competences Acquired Outside Formal Education or Professional Experience and Learning Outcomes Achieved in Previous Education” (approved at the OTC Council meeting on 16 June 2021). The Regulations have been developed in accordance with the Cabinet of Ministers Regulations No. 505 of 14 August 2018 “Regulations on the Recognition of Competences Acquired Outside Formal Education or Acquired in Professional Experience and Learning Outcomes Achieved in Previous Education”. It determines the procedure for the assessment of study results achieved in previous education or professional experience, the conditions of the recognition procedure, as well as determines the conditions for the formation of a study results recognition commission, their rights and obligations.

A person who wishes to have his/her study results achieved in his/her previous education or professional experience submitted an application to the Study Division of the OTC for recognition of the achieved study results. The person shall attach copies of documents to the application and present the original documents certifying the study results achieved in previous education or professional experience. Program director, if necessary, conducts interviews with the person, as a result of which makes a resolution on the application of the person and makes a recommendation on possible recognition of study results achieved in previous education or professional experience to the study results recognition commission and informs the deputy director of study and research about the received application of a person regarding the recognition of the study results achieved in previous education or professional experience.

The decision on the recognition of study results achieved in previous education or professional experience is made by the study results recognition commission established by the OTC (hereinafter - the commission). The composition of the commission is approved by order of the

director.

The commission shall examine the application and take a decision within one month after receipt of the application. The decision shall indicate the amount of the recognized achieved results in credit points (CP), as well as the name of the study course, where the recognized educational results are credited.

The study results achieved in professional experience are recognized:

1. in the part of the relevant study program that consists of practice, moreover, these study results must be achieved in the field of professional activity that corresponds to the thematic field of education of the study program;

2. in the study course of the study program, upon acquisition of which practical knowledge, skills and competence are acquired.

Learning outcomes achieved in previous education are recognized if they correspond to a higher education degree and are achieved:

1. in continuing vocational education programs, the acquisition of which gives an opportunity to obtain the fourth or fifth level of professional qualification;

2. in a separate course, study part or study module of the study program, which the person has acquired as a listener;

3. in other ways acquired outside formal education, except for study programs that correspond to the regulated professions (in this case, in order to recognize the achieved study results as corresponding to the study course of the study program, the person shall take the examinations specified in the relevant study course).

The study results achieved in professional experience may be recognized only in the amount specified in Section 59.2, Paragraph five of the Law on Higher Education Institutions from the study program. In order for the study results achieved in previous education or professional experience to be recognized, the documents presented by the person must contain clear, unambiguous and complete information about the achieved study results; the person's previous education must meet the requirements for admission to the relevant study program; as well as for the achieved study results it is possible to award at least one credit point. One credit point

for study results achieved in previous education or professional experience may be awarded if they have been achieved in an educational process lasting at least one week (40 academic hours).

Admission and matriculation of students, academic recognition of study courses, recognition of study results obtained in previous education or professional experience, matriculation of students in later stages of studies take place in accordance with the process descriptions developed by the OTC (see appendix).

https://otk.rtu.lv/wp-content/uploads/sites/29/2020/11/Uznemsanas-kartiba.pdf

https://otk.rtu.lv/wp-content/uploads/sites/29/2021/09/par-arpus-formalas-izglitibas-apguto-vai-profesionalaja-pieredze-ieguto-kompetencu-un-iepriekseja-izglitiba-sasniegtu-studiju-rezultatu-atzisanu.pdf

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.

When organizing the study process, the study methods should promote the student's responsibility for self-study, they are oriented towards the acquisition of practical skills. Great attention is paid to practical and laboratory work. An integral part of studies is study practice.

The course of studies is determined by the Regulations “On the Procedure of Studies and Examinations” and other regulations and rules.

At the beginning of each study course, the lecturer informs about the work to be performed and the evaluation criteria, i.e. intermediate examinations, laboratory work, practical work and independent work scheduled during the semester/semesters.

The study program determines the study courses to be acquired, their amount in credit points, examinations, the amount of study practice, the number of course papers, the type and conditions of the final examination.

Assessment of students' achievements is based on several regulations: Regulations “On the Procedure of Studies and Examinations” (16.01.2020).

Students have the following examinations in each study course:

- mid-term examination, which promotes qualitative acquisition of the study course. Intermediate examinations are organized in the form of tasks and discussions - students have to prepare answers to specific tasks. The midterm exam is rated on a 10-point scale.

- final examination - this concludes the acquisition of the study course. The final test is a test or exam. The final examination is evaluated on a 10-point scale and can reach up to 50% of the final evaluation of the course. See Appendix 25 "Study Courses".

An integral part of the study program is an internship, as a result of which students submit an internship report to the college for evaluation, as well as present the results of the internship. The final evaluation of the internship consists of the average evaluation of three components: the evaluation from the internship company, the evaluation of the written part of the internship and the evaluation of the presentation of the internship and the student's ability to answer questions. Internships are rated on a 10-point scale.

At the end of the study program, a state final examination is obligatory - elaboration and defense of a qualification paper. The final test is evaluated on a 10-point scale. The knowledge of students in the final examination is assessed by the state final examination commission, the head of which is a specialist of appropriate qualification from another higher education institution or a representative of a relevant profession, as well as the majority of the commission are representatives of professional organizations or employers.

Students have the opportunity to regularly follow their progress at www.mykoob.lv

At the end of the semester, students are sent a summary of grades, see Figure 2.

Kursa nosaukums	Semestris	Reģ.datums	Atzīme	KP	Kārtošanas datums	Pasniedzējs
Darba aizsardzība	I	28.12.2020.	8 (ļoti labi)	1	29.01.2021.	Tatjana Rezņika
Civilā aizsardzība	I	28.12.2020.	7 (labi)	1	29.01.2021.	Andrejs Kotovs
Svešvaloda (Angļu valoda)	I	28.12.2020.	6 (gandrīz labi)	3	29.01.2021.	Abdelmajid El Hadri
Ievads specialitātē	I			1		Jeļena Pisarjonoka
Fizika	I	28.12.2020.	6 (gandrīz labi)	3	29.01.2021.	Ilze Pelēce
Vispārīgā un neorganiskā ķīmija	I	28.12.2020.	8 (ļoti labi)	2	29.01.2021.	Anastasija Jēgermane
Sanitārija un higiēna pārtikas uzņēmumos	I	28.12.2020.	5 (viduvēji)	1	29.01.2021.	Daiga Konrāde
Pārtikas mikrobioloģija	I	28.12.2020.	8 (ļoti labi)	2	28.01.2021.	Laura Žorža
Pārtikas toksikoloģija	I	28.12.2020.	7 (labi)	1	29.01.2021.	Laura Žorža
Informātika	II	21.04.2021.	10 (izcili)	3	14.05.2021.	Dainis Katcens
Vides aizsardzība	II	21.04.2021.	8 (ļoti labi)	1	14.05.2021.	Ivars Pēkainis
Augstākā matemātika	II	10.03.2021.	8 (ļoti labi)	5	30.03.2021.	Elita Kazakēviča
Organiskā ķīmija	II	21.04.2021.	6 (gandrīz labi)	2	21.05.2021.	Māris Utināns
Cilvēka anatomija un fizioloģija	II	13.04.2021.	9 (teicami)	1	13.04.2021.	Daiga Bērtiņa
Pārtikas analītiskā ķīmija	II	21.04.2021.	8 (ļoti labi)	2	21.05.2021.	Anastasija Jēgermane
Bioķīmija	II	21.04.2021.	8 (ļoti labi)	2	21.05.2021.	Jeļena Pisarjonoka
Pārtikas produktu uzturvērtība	II	21.04.2021.	8 (ļoti labi)	1	21.05.2021.	Daiga Konrāde
Prakse	II	21.05.2021.	7 (labi)	6	05.07.2021.	Jeļena Pisarjonoka
Uzņēmējdarbības profesionālo kompetenču modulis	III	14.01.2022.	7 (labi)	6	11.02.2022.	Terēza Korsaka
Lietišķā komunikācija	III	16.12.2021.	8 (ļoti labi)	1	16.12.2021.	Dace Vilkena
Psiholoģijas pamati	III	16.12.2021.	7 (labi)	1	16.12.2021.	Dace Vilkena

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.

The college pays great attention to academic integrity by informing students about it on the first day of study. The regulation of academic honesty is the Regulations on the Procedure of Studies and Examinations (16.01.2020).

See: https://otk.rtu.lv/wp-content/uploads/sites/29/2020/05/studiju-un-pa_rb.-nolikums-2020-1.pdf

The teaching staff's commitment to the basic principles of academic integrity in their attitudes and behavior, even in the face of challenges, is based on the following core values: honesty, dignity, justice, trust, responsibility and courage.

The student observes the principles of academic honesty in the study process. The following acts in particular are considered a breach of academic integrity:

- offering any material value, property or other benefit for the performance or non-performance of an activity in the academic interests of the student or another person;

- participation in a breach of academic integrity, i.e. sk. transferring the results of one's individual work to other persons or submitting the results of a team's work on one's own behalf, if it has been defined as teamwork, taking a test on behalf of another student, signing a site on another student's site or other documents, etc .;

- giving false information about yourself and your work;

- unauthorized acquisition of test questions or test tasks;

- use of unauthorized aids in the study process or plagiarism.

Plagiarism is considered to be:

- transformation of another job or part of a job into one's own job;

- changing the words but copying the structure and idea of the source sentence without using a reference.

To date, no cases of academic integrity and plagiarism have been reported at the College.

The originality and plagiarism of the qualification papers are checked using www.plag.lv

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.

A number of procedures are used to ensure quality (see Part I, Section 1.3 of the self-assessment), which aim to ensure compliance of the study process, study programs, scientific and creative activities, as well as the activities of the higher education institution with the requirements of regulatory enactments, students and the labor market. needs.

Example:

During the reporting period, it was found that several students had difficulties with the development of the course paper and, insufficient results were presented due to insufficient understanding of the research design. Analyzing the reasons at the faculty meeting, it was concluded that it is necessary to change the approach to the development of studies, projects and final theses:

- the procedure for elaboration of works was clarified (incl. structure of works, choice of methodology, principles of using bibliographic sources, etc.);

- careful selection and application of research methodology has been introduced at the beginning of the development of study papers;

- more individual consultations were also provided during the development of the course paper.

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).

Study programs at OTC are reviewed at least once a year. Involved in this process are - the Deputy Director for Studies and Research, the Study Department, the Program Managers and the leading teaching staff in each specific study program. This process is now particularly relevant in the context of the newly developed and approved standards for the various professions.

The last major review and evaluation of study programs was carried out in the early autumn of 2019, shortly after the change of the status of the OTC and the transfer to Riga Technical University (RTU). The Vice-Rector for Studies of RTU and the Director of the Department of Studies, as well as the Director, the Deputy Director for Studies and Research and the Head of the Study Department participated in this analysis and evaluation process.

After analyzing all the available information, it was also decided to create one study program from the two existing study programs of the OTC “Production and Processing” study field “Food Technology” and “Food Quality Control” (with a duration of 2.5 years) - “Nutrition and Food Product quality ”(with a duration of 2 years).

Thus, the whole process was further directed from the OTC. The process of creating the new study program took about six months and was as follows. Following the above-mentioned review, analysis and evaluation meeting of the study programs, the Deputy Director of Studies and Research at OTC and the Head of the Study Department met with AIC experts to clarify all the next steps and activities required to create the new program.

All the necessary materials were prepared and submitted to the AIC in the spring for the evaluation and approval of the new food study program. An external expert was appointed to meet with all the departments and individuals involved in the process.

Already in the summer, the conclusion of the AIC expert was developed and submitted and the decision of the Study Quality Commission on the approval of the required changes in the OTC study program “Food Quality Control” was adopted. The only thing that was not approved was the title of the new study program “Nutrition and Food Quality”, because the external expert had objections about the insufficient amount of study courses specifically on nutrition and the lack of appropriate teaching staff on this topic.

In general, it should be noted that this whole procedure has been worth it, as the last two student enrollments (in 2020 and 2021) have been staffed by groups of Food Quality Control students, which have already started to become problematic in recent years. Thus, several dozen students are already studying in the OTC study program “Food Quality Control”.

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.

Basically, students express complaints and suggestions by submitting questionnaires. To ensure that complaints and suggestions do not escalate into conflict, student surveys are always carefully reviewed and responses provided when information is received. Information exchange and correspondence with students takes place orally and on the platform www.mykoob.lv

If a situation has arisen that the student is not satisfied with the quality of the lecturer's work or the organization of the study process, then in this case the program director or head of the study department conducts discussions with the lecturer, emphasizing the letters. After the interview, the program director informs (in writing or orally) the student about the conversation and asks to report

it immediately if similar situations are repeated. If students submit proposals on the improvement of the study process in a conversation with the director of the study program or the Student Self-Government, then the recipient of the proposal applies to the Director. Proposals are considered at the administration meeting, evaluating the feasibility of their implementation, the amount of resources required, etc.

The submitter of the decision proposal is informed in writing to the e-mail address indicated in the application.

Students are informed orally about the proposals and complaints mentioned in the student survey.

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.

In order to make informed management decisions, OTC regularly collects, analyzes various data, which serve as a basis for the development and implementation of measures to improve the field of study and is an integral part of the internal quality assurance of the college:

- proposals and complaints submitted by students are analyzed. On the basis of it, innovative solutions are selected, developed and implemented in the study process, which allows to adapt the study forms and content to the needs of students and to achieve the intended study results as effectively as possible. For example, during the reporting period, thanks to the research of students' profiles, possible options for the provision of laboratory work have been sought, i. e. Covid-19 unvaccinated students receive information using the zoom platform.

- Regulations of study practices have been revised.

- Once a month, study progress and success indicators are analyzed, which helps to ensure an individual approach to serving students and providing the necessary support.

- Student satisfaction indicators are analyzed: once a year for satisfaction with the program; at the end of each study course on satisfaction with the study course. The indicators obtained in the survey and the students' recommendations serve as a basis for the improvement of the study content and process, support and allow to evaluate the solutions implemented in the previous period and their efficiency. See Appendix 21 "Study Course Questionnaire".

- Graduate satisfaction indicators are analyzed once a year. Based on them, the content of the study program, its compliance with the needs of the labor market and the career paths of graduates are evaluated.

- They also serve as a basis for the evaluation and improvement of the service provided by the college.

- Performance evaluation is performed in the college: once a year with administrative staff, once a year with teaching staff.

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).

In 2020, OTC developed a new website - https://otk.rtu.lv. The website has been developed in accordance with the Cabinet of Ministers Regulations No. 445 “Procedures for Institutions to Post Information on the Internet”, data security and protection requirements. The website is used for the formal provision of the institution's functions. The information is supplemented and updated as necessary. New sections "Library" and "Laboratories" have been developed and are available on the website.

Information about OTC can also be found on the websites of several cooperation partners, for example, https://www.rtu.lv/ , https://www.lifescience.lv/ , https://www.olaine.lv/lv#gsc.tab=0 etc. Through the websites of cooperation partners, OTC provides information about the educational institution and the study programs offered.

The Director of the College is responsible for the compliance of the information available on the College's website with the information available in the official registers.

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.

Memorandum of Understanding between the Ministry of Education and Science and Riga Technical University

The agreement of 4 February 2019 states:

- Cabinet Regulation No. 1316 of 12 November 2013 “Procedures for Calculating and Granting Basic Funding to Scientific Institutions

- MES annual order “On the allocation of basic funding to scientific institutions IUU. year ”

Data on available funding for research and/or artistic creation, its sources and their use for the development of the study field and corresponding study programs - 32 170

euros, project "Pilot Platform of Vocational Excellence Water" (PoVE Water) 612632-EPP-1-2019- NL-EPPKA2-SSA-P collaboration with Friesland College, The Netherlands.

An online training platform was set up during the Pilot PoVE Water project, where leading experts from the participating institutions prepared training materials on various topics related to water supply and quality control. The lecturer of RTU Olaine Technology College participated in the creation and maintenance of the virtual training platform, developing the study material

“Microbiological Control of Drinking Water”. One of the sections of the theoretical material was devoted to potential disease-causing microorganisms that spread through water. The practical part (laboratory work protocol and video material) is dedicated to microbiological testing of water using the membrane filter method. All study materials are available to college students and faculty and can be used as additional teaching aids/study support and are available at: https://resources.povewater.eu/pvle/

The project strengthened international cooperation with various partners from the European Union, resulting in an increase in various activities, such as the opportunity for students and teachers to participate in online exchange events organized by Glasgow Clyde College in the UK and Friesland College in the Netherlands.

Table 2

Analysis of financing for the reporting period from 2013 to 2018

Olaine College of Mechanics and Technology

Year	*Total funding*
2013	158 963
2014	191 244
2015	315 086
2016	323 648
2017	346 881
2018	311 889

Table 3

Riga Technical University Agency “Riga Technical University Olaine Technology College” Year 2019 - 2021

Year	*Total number of study places*	*Total funding*	*Number of study places for the Food program*	*Funding for the Food program*	*Basic payment for study places at opt. coefficients*
2019	102	328 872	36	108 568	3015,75
2020	72	386 938	25	106 640	4265,60
2021	72	362 732	25	117 911	4565,64
2022	71	372 956	20	99 635	4666,80

Source of financing of the study program - state budget grant from the general revenue for the provision of studies

Based on the study costs in 2022, funding of 99,635 Euros is available in the thematic area “Production and Processing”, including 6,300 scholarships.

Costs per student 4666.80 euros, broken down by:

- The base cost of the study place is 1,630.11 euros (one thousand six hundred and thirty euros and 11 cents), at the optimal coefficients of “2.7” in 2022 and 100% security - 4401.30 euros, or 94.3%.

- Calculated financing for the social security of the study place in professional study programs - 251.98 euros, or 5.4%.

- sports, culture, service hotel costs 13.52 euros, or 0.3%.

The number of study places financed from the state budget in 2022 in the program in 2022 is 20 and this is the minimum number of students to provide rehabilitation of the study program.

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.

Laboratory works take place in OTC laboratories. Until 2020, they took place in a separate building, a laboratory building. In the autumn of 2020, 11 new, modern laboratories with equipment suitable for the implementation of educational programs were opened, which are located in the main building of the college.

Of these 11 new laboratories, 4 are also intended for the Food Quality Control study program:

1. Inorganic and organic chemistry study laboratory

The inventory, equipment and furniture necessary for the study process in the study subjects in which the laboratory work is performed in the laboratory of organic and inorganic chemistry have been installed.

In the laboratory you can learn the most important regularities of chemistry, knowledge about chemical elements, their compounds, as well as the transformation and properties of substances. While working in laboratories, students synthesize inorganic and organic compounds, identify them and study their properties.

The laboratory is used in OTC study programs: Biotechnology, Environmental Protection Technology, Food Quality Control. Professional secondary education programs: Chemical Technology, Environmental Protection, Food Quality Control.

The main equipment that is installed: fume cupboard, rotary evaporator with vacuum pump, water deionizer, analytical balance, ultrasonic bath, hand conductivity meter, oven, etc.

2. Analytical chemistry study laboratory

Equipment and furniture have been purchased, which are necessary for the study process in the study subjects in which laboratory work must be performed in the laboratory of analytical chemistry. The laboratory is used in OTC study programs: Biotechnology, Environmental Protection Technology, Food Quality Control. Professional secondary education programs: Chemical Technology, Environmental Protection, Food Quality Control.

Main equipment installed: fume cupboards, muffle furnace, water bath for butyrometers, milk freezing point detector, infrared spectrometer, Karl Fischer titrator, centrifuge with cooling, spectrophotometer, melting point detector, etc.

3. Food technology study laboratory

The inventory, equipment and furniture necessary for the study process in the study subjects have been installed, in which laboratory work in food production technology and quality control laboratory must be performed. The laboratory will be used by OTC study programs: Biotechnology, Food Processing and Production Technology and Food Quality Control. Professional Secondary Education Programs: Chemical Technology and Food Quality Control.

Main equipment installed: pastry and baking oven, kettle, combi oven with drying/smoking function, ice generator, meat cutter, meat mincer, sausage syringe, clipper for closing the ends of the sausage, ice cream/sorbert machine, multifunctional pot, universal fruit and berry additive making machine, pasteurizer, planetary mixer, electric stove, etc.

4. Microbiology training laboratory

The laboratory is used in OTC study programs: Biotechnology, Environmental Protection Technology, Food Quality Control. Professional secondary education programs: Chemical Technology, Environmental Protection, Food Quality Control.

Modern equipment and furniture are installed in the study subjects, where laboratory work related to microbiological testing, DNA extraction and research, water testing (total number of microorganisms, E. coli, coliforms, and enterococci) and other microbiological examinations must be performed.

Students can perform water testing as well as microbiological testing of food, cosmetics and environmental samples, as well as plant tissue and cell culture research.

Professional secondary education programs: Chemical Technology, Environmental Protection, Food Quality Control. Main equipment installed: fume hood, water deionizer, laminar air flow cabinet, incubator with heating and cooling function, automatic vertical autoclave, trinocular

microscope with video camera, laboratory mixer, microscope, orbital shaker, electrophoresis equipment, etc.

Lecturers also have portable projectors and tablets for laboratory use. Laboratories have all the necessary material and technical support for the development of practical skills and competencies required for the profession of food quality specialist.

Students are given the opportunity to use study laboratories, to develop their research work outside of classes. In connection with the rapid development of food technology, it is necessary to continuously improve and perfect the material and technical base of the study field in order to ensure the quality of education that meets the requirements of the modern labor market.

Historically, the material and technical base is 20 455.58 euros, see Annex, Table 4. (The attached information in the appendix is available only in Latvian)

Investments made for the 2010 ERDF project “Modernization of OMTK premises and equipment to improve the quality of study programs” - total investment amount 32 919.53 euros, see Annex, Table 5. (The attached information in the appendix is available only in Latvian)

Project no. 8.1.4.0/17/I/005 “Improvement of the study environment in Riga Agency of the Technical University of Riga Technical University Olaine Technology College” investments in the establishment of new laboratories - total investment amount 390 853.67 euros, see Annex, Table 6

(Specific equipment intended for the study program - specify Part III, Chapter 3) (The attached information in the appendix is available only in Latvian) Value 139 734.29 euros, see Annex, Table 7. (The attached information in the appendix is available only in Latvian)

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.

At the beginning of the study course, the lecturers and the librarian acquaint the students with the descriptions of the study courses and the study and additional literature mentioned in them, which is available in the RTU OTC library. The library has general literature, audiovisual and periodicals in Latvian, English, Russian and German.

The library collection consists of a total of 9755 items, 30% of the collection items are educational literature related to the Food Quality Program with a focus on production and processing. Acquired 95 access licenses to ISO standards related to the program - Food Quality Control in the direction - production and processing. ISO standard licenses are also offered to interested students.

At Olaine Technology College, the librarian recommends the following open access databases to students, which are not specific to this program, but contain topics on any current field and are helpful in translating and understanding terms and foreign words in any field. These links to databases are also posted on the College's website for students to use during distance learning:

Academia.edu. https://www.academia.edu/

Thesaurus https://tezaurs.lv/

Terms https://termini.gov.lv/atrast/t%C4%93zaurs

NLL portal books lndb https://gramatas.lndb.lv/ - here you can find and read many textbooks in the digital environment, not only the most recent, but there are many books related to food production and control, the next 2 links go directly to books in the preferred direction: https://gramatas.lndb.lv/#searchResults:%23P%C4%81rtikas%20produktu%20kvalit%C4%81te%20un%20kontrole
https://gramatas.lndb.lv/#searchResults:%23P%C4%81rtikas%20ra%C5%BEo%C5%A1ana%20un%20p%C4%81rstr%C4%81d Academic terms http://www.akadterm.lv/term.php

Zenodo https://zenodo.org/

Latvian encyclopedia https://enciklopedija.lv/

Thanks to the project "Improvement of the study environment of the Riga Technical University Agency "Riga Technical University Olaine Technology College" 967 books have been purchased, which include both sources of study information in Latvian and English for university students and cultural and historical literature on food production and processing. 40 printed matter.

The library, in cooperation with the ILL (interlibrary loan), subscribes to the study literature required for any branch and field, which is missing from the library.

On the part of the teaching staff and management, the College evaluates and considers the possibility of subscribing to the necessary databases for the specified program and direction.

Every academic year the lecturers of the study courses submit to the RTU OTC librarian the list of necessary information sources to improve the library collection with the latest information sources in the fields of study, the library evaluates the existing collection every year, outdated sources of teaching and other literature.

The library reading room is available to 20 visitors at a time. The library has 6 computers with Internet connection, as well as 2 copiers, 2 printers and 3 scanners, which students use in the study process.

The use of electronic materials retrieved by teachers from databases and other websites is used as a practice in the College to ensure the quality of the study process.

The library offers study materials prepared by lecturers in a digital environment, as well as standards for designing study courses and qualification papers. If necessary, the librarian advises students on the resources available in the library and their use, as well as helps to search for quality information on websites and open access databases.

The library is open for information retrieval. The working hours of the library allow you to easily use the services of the library - 5 times a week its working hours are from 8.30 am to 5.00 pm, you can also agree to subordinate the working hours to the needs of students. RTU OTC website has a section "Library", which provides information about library services and introduces the latest news and digital information 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.

An e-environment is available for the needs of the study process: OTC website, Mykoob and Moodle. Mykoob is used as a communication platform and students have transparent topics and assessments. Moodle is used as a website for study course materials, independent work, practical work and midterms (tests). At the beginning of the study course, each teacher/lecturer introduces the student to the Moodle environment and the placed materials and their availability. On the Moodle website, lecturers enter all the independent work and their completion times, as a result of which students have transparent completion times in the calendar.

During the Covid-19 pandemic (distance learning process), lecturers used Zoom, Skype platforms to

conduct lectures, but the materials were posted in Moodle or sent to Mykoob e-environment. Practical work (including laboratory work) was recorded by teachers/lecturers in the laboratory and sent to students, in other study courses such as chemistry, biochemistry, microbiology, etc. virtual labs were used: labster.com, chemcollective.org, etc. platforms, as well as simulations and entries available on youtube.com.

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.

OTC has full-time lecturers and visiting lecturers, see Annex 9.

A job advertisement is placed on the website to attract teachers. Due to limited resources, ads are not placed on paid platforms. However, in recent years, the response to job postings has been low. In order to address the issue of the involvement of the teaching staff, the lecturers, in cooperation with other higher education institutions, are addressed in person, who mostly establish a positive cooperation for more than one academic year.

Regardless of the status of a lecturer in a college, the evaluation of candidates is based on the following criteria:

- Acquired education;

- Pedagogical work experience;

- Professional work experience;

- Achievements in science and/or creative work;

- Communication skills.

When starting work at the university, each lecturer is introduced to the organization of the study process, work safety and fire safety instruction is given, the lecturer's profile is created www.mykoob.lv, information about work and opportunities to provide support in the e-environment is provided, etc. induction activities.

Information about the organization of the study process, scientific and creative activities, internal regulations is available on the college's website or the information is sent to the platform www.mykoob.lv

The quality of the work of the teaching staff is assessed by analyzing the results of the student survey (twice a year), scientific and creative activities (once a year), adherence to the schedule, communication with the administration and students and the number of complaints submitted (if applicable). Teachers are informed about the results of the evaluation of the quality of their work, introducing them to the results of the survey, etc. If shortcomings are identified, they are discussed individually with each teacher, highlighting actions to address the shortcomings. Interviews are organized by the director of the study program.

s e e https://otk.rtu.lv/wp-content/uploads/sites/29/2021/01/Nolikums_-par_akademiskajiem_amatiem_20_10_2020.pdf "Par akadēmiskajiem amatiem". The regulations attached to the website are

available in Latvian.

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.

Upgrading the qualification of the teaching staff of the study field OTC organizes the following events for raising the qualification of the teaching staff:

1) Scientific seminars. Their aim is to promote the involvement of teachers in research, as well as to provide support for the preparation of publications in internationally cited databases;

2) Methodological seminars;

3) Methodological conferences;

4) Participation in international scientific conferences in Latvia;

5) Courses according to the defined learning needs.

In-service training activities are organized taking into account the development priorities of the university and current events in the industry.

Staff motivation and development improvement

Remuneration element	Activity	Justification

Improvement of the monetary remuneration system	**Evaluation of results. A fair and adequate remuneration system for the country's economic situation**	Regular evaluation of employees - remuneration is directly related to work results. Depending on the results of the evaluation, the employee's training and development needs, professional development opportunities and goals for the next period are identified. Staff evaluation takes place in accordance with 10.07.2012. Cabinet Regulation No. 494 “Regulations on Performance Evaluation of Employees in State Direct Administration Institutions”, which prescribes the procedure for evaluating the professional development of employees and individual contribution to achieving the goals of the institution once a year or more often. The selection and operation of the academic staff at the College is regulated by the Regulations of the OTC, which have been developed in accordance with the Law on Higher Education Institutions and the Law on Vocational Education. Requirements have been set for applicants for academic and elected positions (assistant professor, lecturer), professional experience and performance of applicants is assessed. It is planned to establish an internal quality evaluation commission, which will develop criteria for the improvement of teachers' salaries in accordance with the results of the evaluation of the quality of pedagogical work. Adherence to and evaluation of personnel selection procedures ensures that OTC teaching staff are academically educated, professional specialists with excellent pedagogical competencies. General staff are professionals in their field. The aim of the evaluation is to work more qualitatively with a higher sense of responsibility, to get involved in research activities.
	Career and growth opportunities	By developing the employee's professional skills, the result is achieved faster, added value is created - efficiency, daily routine is reduced. Opportunities for professional development are created by fulfilling one's own and the institution's mission. It is necessary to interest teachers in active participation in the activities offered by ERASMUS +, international seminars and conferences, internships in industry companies.
	Safe working environment	Safe, aesthetic work environment, ensuring good working conditions - premises (warm, ventilated, sufficiently lit), inventory and equipment in working order, ICT equipment. Sufficient raw materials, substances, etc. If necessary, to provide user support in working with ICT technologies.
	Social protection (guarantees)	Statutory mandatory contributions are made. The person is socially insured. Compulsory annual health examinations are paid for. We strive for the possibility to provide a health insurance policy, if necessary, the purchase of glasses.

Improvement of the non-monetary remuneration system	**Employment contracts in accordance with the law. Job descriptions**	Clear, understandable working conditions and responsibilities. Acceptable scope and policy of the institution. Trust has been given and authority given.
	Motivation	● Setting goals, identifying needs. A conversation about the results to be achieved and the competencies to be developed. ● Task setting - focus on what needs to be developed. ● Attitude building. Increase employees' confidence in their abilities by providing positive feedback on their achievements, on the efforts made, indicating the progress towards the desired success. ● Recognition for quality work done. ● Satisfaction with what has been done.
	Support for "young people"	Adaptation package. A support plan with a goal and objectives is defined. Scheduled work schedule. An assessment has been made as to whether the expected result has been achieved. It is necessary to develop a support program, including the attraction of graduates of OTC college study programs to work at OTC.
	Formal events	Information meetings, gatherings, sittings. Progress in fulfilling tasks and responsibilities. Information about the processes taking place in the institution, involving employees in the planning and execution of important tasks.
	Informal events	Promoting a sense of belonging to the OTC family, the chemical, pharmaceutical, biotechnology, environmental and food and related industries. Free and pleasant atmosphere. Creating and maintaining traditions. Regular events to strengthen team spirit and loyalty.
	Needs assessment	Questionnaire with the aim to put forward proposals for the improvement of the staff motivation system and its development.

We use the general motivation model in staff motivation and development improvement planning:

1. Identify needs;

2. We are looking for opportunities to meet needs;

3. Choose actions to meet needs;

4. Evaluate the result achieved in meeting the needs;

5. We are looking for new needs.

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.

17 lecturers are involved in the implementation of the study field, see 9. in the Annex. Processing the information included in the tables, it can be observed that the qualification of the academic staff employed in the study program of the study field corresponds to the implementation of the goals and tasks of the higher school, because:

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

During the reporting period, no teaching staff was provided full-time. Faculty members have the opportunity to participate in the Erasmus + mobility program. The number of outgoing teachers is limited by the number of mobilities required and the amount of funding allocated.

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.).

In the study process, OTC provides students with the following support:

1. Information support. Information about the organization of the study process is available on the OTC website, information about the most important news, conferences, events, internship opportunities, job opportunities is regularly sent to mykoob.lv.

2. Methodological support:

- the teaching staff introduces the study course materials, course acquisition requirements, links to freely available bibliographic sources. All this facilitates access to the necessary information for study courses;

- consultations on the acquisition of the study course in person and electronically (e-mail, Skype, Whatsapp);

- consultations on the development of studies and final theses;

3. Career support:

- guest lectures with industry professionals on the challenges of specific professions;

- study tours in companies and organizations;

- participation in professional competitions,

- support for internships is provided where necessary.

4. Financial support:

- opportunity to receive a budget study place;

- apply for a budget and a one-time scholarship.

5. Technical support: prevention of e-environment malfunctions, requirements for devices used in the study process.

Students of RTU system and subordinate institutions have the opportunity to receive psychological support in the Student Service of Riga Technical University in the following areas:

• feel difficulties in planning time for study work and rest;

• unable to cling to tasks and overcome laziness;

• experience prolonged stress and anxiety or experience significant changes in your life.

• as well as in cases of crisis (losing a loved one, experiencing violence, fighting suicidal thoughts, etc.).

Psychologist support for students and employees of RTU system and subordinate institutions is free of charge.

The purpose of the psychological support program is:

• to help students develop new strategies for managing study-related stress and time planning;

• to help see a solution to communication difficulties, lack of motivation, long-term malaise,

burnout syndrome, etc. t. t .;

• to promote the psychological well-being of students and employees of the RTU system and subordinate institutions.

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).

The research work of the academic staff is related to the lecturers' courses, mainly food additives and their functions are studied.

The closest cooperation is with the institute BIOR, where the largest number of practice places is realized and study tours are organized regularly. The practical training of students is highly valued in the laboratories of food companies. Specialists of food employers are invited to get involved in the development and defense of students' qualification papers, as well as to participate in the qualification examination commission.

In the investment and development strategy of OTC for the next period, one of the main strategic goals is to promote the improvement of practical scientific activities in the institution. This is to be achieved through the following activities:

- linking education and research and thus improving the quality of studies;

- conducting research on the development of new products and technologies;

- creating topical educational programs in the field of STEM;

- as well as conducting a feasibility study for commercialization of the planned research projects.

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.

With the establishment of the new, modern 11 laboratories in the premises of OTC, the activities of scientific research and their connection with the study process must increase significantly. The use of scientific research results in the study process should be especially encouraged.

In order for companies in the industry to be able to use the latest technologies, create new products and collaborate effectively with research organizations, they need their own highly qualified specialists. Such professionals will significantly increase productivity and product value by creating and using innovative products and

technologies to improve the profitability of companies. High-quality provision of specialists in the fields of specialization of OTC, incl. food quality control is one of the basic preconditions for the sustainable growth of the sector. Carrying out research of common interest OTC will carry out the necessary applied research for the industry. Certain groups of researchers will make a positive contribution to the productivity of companies in the sector and increase the value of their products by working with companies on projects of common interest.

The OTC will focus on quality and research challenges in basic science, which studies, analyzes and explains general patterns regardless of their practical application. This will promote competition between OTC pupils and students in the labor market and increase the quality of education received.

Several teaching staff members include elements and conclusions of their scientific articles and research in their lectures and practical work for students. Teaching staff also mostly compile their course descriptions on the basis of various scientific studies in their subject areas.

During the reporting period, 4 teaching staff members wrote five publications on food quality issues, which were printed in the collections of scientific articles of RTU OTC Scientific-Practical Conferences. Also, five lecturers participated in conferences on various food issues and gave guest lectures in similar types of foreign educational institutions within the framework of ERASMUS project mobilities.

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 2019-2021, OTC continued its activities in the international project Pilot Platform of Vocational Excellence Water (Pilot PoVE Water). At the beginning of 2020, 2 participants in the OTC project participated in a joint project activity in

Brussels. Subsequent meetings, seminars and other activities took place remotely for the rest of the year. In 2021, it is very likely that some activities will be able to take place again in person.

Pilot PoVE Water aims to develop existing and emerging professional competencies and skills in the water sector, transforming them into a form of professional excellence and ensuring a vertical integration of vocational education with the knowledge triangle and a sustainable link with regional economic and social systems.

The project aims to create the infrastructure needed to strengthen professional excellence in the water sector in Europe, laying the foundations for the development of vocational education programs and the development of competences in vocational education and training (VET) students.

OTC teaching staff will continue to look for opportunities to participate in international projects.

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.

Every two years, the OTC holds a scientific-practical conference.

2014/2015 The 4th scientific-practical conference took place in the academic year 2017/2018. 5th scientific-practical conference in the academic year and 2020/2021. 6th scientific-practical conference in the academic year, which was attended by students, academic staff and industry professionals.

Conference papers are compiled in collections of scientific articles available in the OTC library. In 2015, the 3rd volume of the collection of scientific articles of the Olaine College of Mechanics and Technology was published, in 2017 the 4th volume and in 2020 the 5th volume of the collection of scientific articles of Riga Technical University Olaine Technology College. The research activity of the academic staff of the study program “Food Quality Control” is related to the content of the course. The list of the main scientific publications, creative activities and prepared study literature of the academic staff involved in the implementation of the study field is given in the Appendix.

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 main goal of the first level professional higher education is to prepare students for the profession, therefore the study program envisages the acquisition of knowledge and skills required for a professional qualification. Consequently, the study program has a proportionately smaller amount of academic knowledge than the academic study programs.

The involvement of students in research activities is mainly related to the development of term papers, independent work and final qualification papers. In the process of developing works, students get acquainted with the latest literature in the field to develop projects, the implementation of which would increase production efficiency. During the elaboration of these works, students acquire the professional competencies necessary for further academic and professional growth - independence, use of correct scientific terminology, critical evaluation of literature and obtained data.

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.

The main emphasis in the direction of various forms of innovation in OTC is and will continue to be focused, mainly in the direction of the basic principles of the “green course”. The main task is to identify potential growth opportunities and future prospects in accordance with the basic principles of the “green course”, for example, by ensuring the utilization of raw materials for practical research work in accordance with the basic principles of the “green course”.

It is intended to integrate all the UN Guiding Principles for Sustainable Development into teaching, learning, science and governance processes, using resources in a sustainable and efficient way, thus minimizing negative impacts on the environment.

The competence and understanding of the teaching staff of the UN Guiding Principles for Sustainable Development is regularly strengthened, and an inclusive teaching and learning environment that promotes sustainable development is created and improved.

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.

In recent years, one of the College's priorities has been to promote cooperation with employers and other higher education institutions with the aim of improving the quality of studies. In order for the professional study program to be sustainable and relevant in the rapid development of modern technologies, it is necessary to continuously improve it in accordance with the demand of the industry. In order to maintain a high-quality study process and receive information about the necessary changes in the study program as soon as possible, close cooperation with companies and organizations related to the field should be implemented.

OTC has close co-operation with the Latvian Chemical and Pharmaceutical Association and the Latvian Biotechnology Association, as well as with the Council of Experts on Food and Agriculture (NEP), which is under the auspices of the Latvian Employers' Confederation (LDDK). The Association of Latvian Chemical and Pharmaceutical Industry (LAĶĪFA) consists of companies active in the production and distribution of pharmaceuticals, chemicals and reagents, rubber products, coating materials, detergents and cleaning products, cosmetics and consumer goods. The aim of the association is to represent the interests of the industry's entrepreneurs, and one of them is to obtain qualified industry professionals. OTC in cooperation with LAĶĪFA ensures the updating of programs in accordance with the needs and trends of the labor market. In cooperation with LAĶĪFA, opportunities for the development of the study field and introduction of new programs are planned in accordance with the demand of the labor market. LAĶIFA has launched advertising campaigns to attract young people to the chemical and pharmaceutical industry, which can successfully promote OTC one of the development strategy plans - to increase the number of students in the program.

Cooperation with various companies in the field ensures the interconnection and interaction of

education and practical skills, as well as the compliance of students' professional competence with the requirements of the labor market, ensuring an essential and integral part of professional higher education study programs - quality study practice. The most important social partners are: JSC “Grindeks”, JSC “Olainfarm”, JSC “BAO”, SIA "Bauskas ūdens", JSC “Latvijas balzams”, JSC “Rīgas Piena kombināts”, SIA„ EKO Osta ”, SIA„ Jelgavas ūdens ”, Pārtikas drošības, dzīvnieku veselības un vides zinātniskais institūts "BIOR", SIA„ Silvanols”, JSC „Madara Cosmetics ”, SIA „Lyngson", SIA „Biotehniskais centrs”, JSC „Olaine Chemical Plant BIOLARS”, JSC “Aldaris” and other companies throughout Latvia. As a result of the cooperation, students are offered study tours in companies and internship opportunities. Leading specialists in the field are involved in conducting professional training courses, giving guest lectures, reviewing study qualification papers and as members of state qualification examinations.

In the study program “Food Product Quality Control” the closest cooperation is with the Latvia University of Life Sciences and Technologies, which has the closest related programs to this OTC study program. The OTC cooperation agreement with the Latvia University of Life Sciences and Technologies allows college students to use the collections of the university's library resources and subscribed databases.

It should be noted that with most of the cooperation partners, this cooperation is historical and has been started for a long time. The main criteria for attracting new partners are, of course, their link to food quality issues. This applies both to production and processing enterprises and to similar types of domestic and foreign higher education institutions.

The mechanisms for attracting partners are mainly personal contacts, participation in various joint conferences, seminars, training courses and other activities, as well as mutual talks on students' opportunities for internships, excursions and other similar issues of mutual cooperation.

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.

OTC's international strategy focuses on the development of the College as a whole in order to raise and improve education and training standards based on the latest developments in higher education in Europe, as well as to develop and strengthen international cooperation and academic staff mobility.

Due to the lack of related colleges in Latvia, the college aims to make the most of the opportunities offered by the Erasmus + program by promoting cooperation and increasing the number of the college's international partners with higher education institutions in the European Union. As a result of the mobility of Erasmus academic staff, a bilateral cooperation agreement was concluded with the Aarhus Business Academy in Denmark at the end of 2015. The bilateral cooperation agreement provides an opportunity for the teaching staff to exchange pedagogical and scientific experience, as well as to conduct guest lectures or practical work. As a result, several mobility of OTC lecturers and staff to the Aarhus Business Academy has taken place over the years, and representatives of

the academic staff from the Aarhus Business Academy have also given guest lectures to OTC students. OTC has a similar cooperation with the Pyramid in Maribor, Slovenia. It is planned to expand the network of partner universities in the coming years.

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.

In order to start implementing international cooperation in the field of studies, the college in 2013/2014. set the goal of obtaining an Erasmus + student charter in the 2014/2015 academic year it was obtained; in the academic year it was obtained. The principles of Erasmus Higher Education Charter 2014-2020 awarded by the OTC were developed for the quality organization of international mobility and the selection of students, giving everyone the opportunity to study abroad in the form of an exchange.

It should be noted that on 26 May 2020, the OTC developed and submitted a new draft ERASMUS Charter for Higher Education in English for the period 2021-2027, which incorporates the same principles. The new Charter was approved by the European Commission on 22 December 2020.

At present, the College's policy of international cooperation and internationalization seeks to make the most of the opportunities offered by Erasmus + mobility in higher education. The involvement of lecturers and staff in mobility programs is motivated, with the aim of concluding new inter-institutional cooperation agreements on student, staff and teacher mobility. Many mobilities have taken place during these years, resulting in a number of cooperation agreements for the mobility of teachers and staff. Within the framework of staff mobility, significant pedagogical and professional experience is gained, cooperation agreements are formed, and ideas for the improvement of study programs and the study process are found.

International experience is also important for the personal development of college students. No outgoing and incoming student mobility has taken place in the past period. Currently, the goal is to look for new potential partner universities that implement related study programs, with the aim of creating cooperation agreements on student mobility. After concluding the cooperation agreement, it will be possible to promote and ensure student mobility in accordance with their interests. However, it should be noted that currently students have little interest in study mobility, but there is interest in the possibility to go abroad for an internship. The reason for the low interest in opportunities to study abroad within the exchange program is, according to the students, insufficient knowledge of foreign languages. Thus, the internationalization policy of the college envisages improving the study course “Foreign Language” and motivating students to participate in mobilities.

Mobility of the academic staff of the study field takes place within the framework of the “Erasmus +” project. As part of the Erasmus mobility program, a number of OTC lecturers and staff have visited Slovenia in the last years before the Covid pandemic to exchange experiences with the Aarhus Business Academy in Denmark and The education center pyramid Maribor in Slovenia. During the mobility, the education system in Denmark and Slovenia was introduced, companies in

the field were introduced, participation in the study process and laboratory work took place, and the work of foreign colleagues was promoted, promoting professional development. As a result of the mobilities, bilateral cooperation agreements were concluded.

This is the first year that Erasmus + will be used for student mobility. The results of the mobility are also positively reflected in the work of the assistant professors, therefore OTC is interested in using the opportunities provided by the program and 6 applications were submitted for the next period, 3 of which will be implemented soon. , as well as to create new opportunities for cooperation with related colleges in Europe. In the next academic year, it is planned that two lecturers will go to conduct lectures and laboratory work at higher education institutions with which a cooperation agreement has been concluded. The remaining two trips are intended to search for new cooperation opportunities with higher education institutions that implement study programs in food quality control or are very closely related, thus teachers will have the opportunity to go to other colleges in the European Union as well as to create new opportunities for cooperation with related colleges in Europe.

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.

1) Several EU ESF projects were submitted and implemented, as a result of which the material and technical base of RTU OTC was significantly improved, and the quality of studies and processes were undoubtedly improved.

2) The ERASMUS regulations were approved and the first student mobility was planned, which would definitely have a positive impact on the quality of studies for these students. Unfortunately, due to the COVID pandemic, this mobility has not yet taken place.

3) During the reporting period, several mobilities of the academic staff have taken place, which have contributed to the improvement of the quality of the study process and the improvement of certain processes in the study program. Those members of the academic staff who have been in mobilities have found ideas in similar types of foreign higher education institutions and introduced examples of good practice in their courses in the relevant study program.

4) During the reporting period, several agreements were concluded with Latvian higher education institutions, which envisage certain activities and measures to improve the quality of studies and improve the study processes in the study program.

5) In recent years, several dozen lecturers and industry professionals have been invited and acted as lecturers at OTC, as guest lecturers and participating in OTC Scientific Conferences. There was mostly very good feedback from students on these lecturers and guest lecturers.

6) During the reporting period, 5 OTC graduates have been attracted to continue working in the college as teaching staff, and several graduates have also worked in the college administration. Of

course, this should be mentioned as a positive aspect for ensuring the continuity of the institution and improving the quality of studies.

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).

Table 4

Expert groups recommendation and recommendations fullfilment

Nr	*Expert groups recommendation*	*High school/colleges activity*	*Achievable results*	*Implementation date*	*Recommendations fullfilment*
1.	Develop a strategy for attracting college teachers	Inclusion of issues and sections of the College's teaching staff in various strategic documents - OTC Strategy 2015-2020 and OTC Development and Investment Strategy 2021-2027	Strategic documents have been developed that would facilitate the attraction of highly qualified teachers to the OTC	Until 2023	Both major OTC strategic documents (OTC Strategy 2015-2020 and OTC Investment and Development Strategy 2021-2027) have developed and included sections on attracting teachers to OTC. The work plan for the new strategy, for example, includes a section on attracting highly qualified human resources - a specific motivational program for teachers is planned to be developed by 2023 for the provision of human resources

2.	To ensure the qualification of the teaching staff involved in the implementation of studies in accordance with the Law on Higher Education Institutions	Teaching staff who did not meet these requirements are currently studying for their qualifications in accordance with the Law on Higher Education Institutions	The qualification of the teaching staff involved in the implementation of OTC studies complies with the provisions of the Law on Higher Education Institutions	Until 2023	The teaching staff of the OTC, who only partially met the requirements specified in the Law on Higher Education Institutions in terms of their acquired qualifications, is currently studying and is on the way to obtain a qualification that would fully comply with the requirements specified in the Law on Higher Education Institutions

1. Both the inclusion of separate sections for the involvement of teachers in the Development and Investment Strategies of RTU OTC and the work on the teacher motivation program have facilitated the attraction of new teachers in several subjects of the study program and thus also increased the quality of studies.

2. An employee with a qualification in accordance with the Law on Higher Education Institutions has been hired and thus a full-fledged work and study process in the study field and in the corresponding program has been ensured.

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	NR_1_pielikums_ENG.docx	NR_1_pielikums.docx
The management structure of the higher education institution/ college	NR_2_pielikums_ENG.xls	NR_2_pielikums.xls
II - Description of the Study Field - 2.1. Management of the Study Field		
Plan for the development of the study field (if applicable)	NR_3_pielikums_ENG.docx	NR_3_pielikums.docx
The management structure of the study field	NR_4_pielikums_ENG.docx	NR_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.	NR_5_pielikums_ENG.docx	NR_5_pielikums.docx
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.	NR_6_pielikums_ENG.docx	NR_6_pielikums.docx
Standard sample of study agreement	NR_7_pielikums_ENG.doc	NR_7_pielikums.doc
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	NR_8_pielikums_ENG.docx	NR_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	NR_9_pielikums_ENG.docx	NR_9_pielikums.docx
Biographies of the teaching staff members (Curriculum Vitae in Europass format)	NR_10_pielikums_ENG.zip	NR_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.	NR_11_pielikums_ENG_03_05.edoc	NR_11_pielikums_03_05.edoc
A statement of the higher education institution/ college on the respective foreign language skills of the teaching staff involved in the implementation of the study programme at least at B2 level according to the European Language Proficiency Assessment levels (level distribution is available on the website www.europass.lv, if the study programme or part thereof is implemented)		
II - Description of the Study Field - 2.4. Scientific Research and Artistic Creation		
Summary of quantitative data on scientific and/ or applied research and / or artistic creation activities corresponding to the study field in the reporting period.	12_1_pielikums_ENG.docx	12_1_pielikums.docx
List of the publications, patents, and artistic creations of the teaching staff over the reporting period.	NR_12_pielikums.docx	NR_12_pielikums.docx
II - Description of the Study Field - 2.5. Cooperation and Internationalisation		
List of cooperation agreements, including the agreements for providing internship	NR_13_pielikums_ENG.docx	NR_13_pielikums.docx
Statistical data on the teaching staff and the students from abroad	NR_14_pielikums_ENG.docx	NR_14_pielikums.docx
Statistical data on the incoming and outgoing mobility of students (by specifying the study programmes)	NR_15_pielikums_ENG.docx	NR_15_pielikums.docx
Statistical data on the incoming and outgoing mobility of the teaching staff	NR_16_pielikums_.xls	NR_16_pielikums.xls

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.	NR_17_pielikums_ENG.docx	NR_17_pielikums.docx
An application for the evaluation of the study field signed with a secure electronic signature	Iesniegums_ENG.pdf	Iesniegums (1).edoc
III - Description of the Study Programme - 3.1. Indicators Describing the Study Programme		
Sample of the diploma and its supplement to be issued for completing the study programme		
For academic study programmes - Opinion of the Council of Higher Education in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions (if applicable)		
Compliance of the joint study programme with the provisions of the Law on Higher Education Institutions (table) (if applicable)		
Statistics on the students in the reporting period		
III - Description of the Study Programme - 3.2. The Content of Studies and Implementation Thereof		
Compliance with the study programme with the State Education Standard		
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard or the requirements for professional qualification (if applicable)		
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)		
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme		
The curriculum of the study programme (for each type and form of the implementation of the study programme)		
Descriptions of the study courses/ modules		Studiju_kursi.zip
Description of the organisation of the internship of the students (if applicable)		
III - Description of the Study Programme - 3.4. Teaching Staff		
Confirmation that the academic staff of the doctoral study programme includes not less than five doctors, of which at least three are experts approved by the Latvian Council of Science in the branch or sub-branch of science in which the study programme intends to award a scientific degree (if applicable)		
Confirmation that the academic staff of the academic study programme complies with the requirements specified in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions (if applicable)		

Other annexes

Name of document	Document
Informēšana par personas datu apstrādi	piekrisana_2021.doc
Information on the processing of personal data.doc	Information on the processing of personal data.doc
Materiāltehniska bāze_LV	Materiāltehniska bāze.docx
apraksti.zip	apraksti.zip
NR_18_pielikums	NR_18_pielikums.docx
NR_18_pielikums_ENG	NR_18_pielikums_ENG.docx
NR_19_pielikums_Studentu_aptaujas_anketa	NR_19_pielikums_Studentu aptaujas anketa.docx
NR_20_pielikums_Absolventu_aptaujas_anketa	NR_20_pielikums_absolventu_anketa.docx
Informēšana par personas datu apstrādi	Informēšana par personas datu apstrādi.doc
Nr_21_pielikums_Studiju_kursu_aptaujas_anketa	NR_21_pielikums_Studiju_kursu_aptaujas_anketa.docx
NR_21_pielikums_Studiju_kursu_aptaujas_anketa_ENG.docx	NR_21_pielikums_ENG.docx
NR_20_pielikums_absolventu_anketa_ENG.docx	NR_20_pielikums_absolventu_anketa_ENG.docx
NR_19_pielikums_Studentu_aptaujas_anketa_ENG	NR_19_pielikums_Studentu aptaujas anketa_ENG.docx
Sadarbības līgumu	Sadarbibas ligumi.zip

Food Quality Control (41541)

Study field	*Manufacture and Processing*
ProcedureStudyProgram.Name	*Food Quality Control*
Education classification code	*41541*
Type of the study programme	*Short-cycle professional higher education study programme*
Name of the study programme director	*Jeļena*
Surname of the study programme director	*Pisarjonoka*
E-mail of the study programme director	*jelena.pisarjonoka@otk.lv*
Title of the study programme director	-
Phone of the study programme director	*+37125902541*
Goal of the study programme	*The aim of the study program is to prepare 4th level professional qualification food quality specialists for food production companies or company laboratories and/or quality control laboratories that organize and/or perform regular sampling of the external environment, raw materials, intermediates and finished products for laboratory testing. or perform sample registration, chemical and microbiological analyzes in accordance with the internal quality and/or safety system developed in the company, present the results of the analyzes, compare them with the requirements of the standard and the safety of foodstuffs and their raw materials.*
Tasks of the study programme	*The tasks of the professional study program include:* *- to ensure the acquisition of the profession in accordance with the requirements of the food industry;* *- to provide students with an opportunity to develop skills and abilities in raising and solving professional problems;* *- to ensure the quality of education at a level which allows for further education in Level 5 and other higher education programs;* *- to carry out applied research.*

Results of the study programme	*Graduates of the study program:* *Knowledge* *- Knows and understands food quality assurance and quality system management.* *- Knows and understands the technology of food production.* *- Knows food testing methods.* *- Knows management of hygiene requirements in the food chain.* *- Knows food legis-lation.* *Skills* *- Able to organize sampling of raw materials, food products and indoor environment for quality control in laboratories.* *- Able to perform chemical analysis and microbiological testing of food products in accordance with the requirements of the standards.* *- Able to handle equipment and apparatus used in food control laboratories.* *- Able to organize and provide verification of important and other measuring equipment, calibration of measuring instruments.* *- Able to introduce testing documentation in laboratories and plan hygiene inspections in the company.* *Competence* *- Able to assess the conformity of the equipment, equipment, agents, agents and other materials required for testing to the task and quality requirements, as well as to organize their use and storage.* *- Able to summarize and statistically process the obtained test results.* *- Able to control the compliance of food product quality with regulatory technical documentation.* *- Able to create and maintain a quality system documentation in the company, analyze food risks and plan necessary laboratory tests.*
Final examination upon the completion of the study programme	*Successfully mastered the study program, defended the qualification paper*

Study programme forms

Full time studies - 2 years - latvian

Study type and form	*Full time studies*
Duration in full years	*2*
Duration in month	*0*
Language	*latvian*
Amount (CP)	*80*
Admission requirements (in English)	*see https://otk.rtu.lv/wp-content/uploads/sites/29/2020/11/Uznemsanas-kartiba.pdf*

Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	*Food quality specialist*

Places of implementation

Place name	City	Address
Mechanics and Technology College of Olaine	OLAINE	ZEIFERTA IELA 2, OLAINE, OLAINES NOVADS, LV-2114

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.

RTU Olaine Technology College implements the 1st level professional higher education study program “Food Quality Control” in the study field “Production and Processing”, which is accredited until June 30, 2022. Until 2020, the study program was implemented in full-time studies for 2.5 years, in Latvian, the qualification to be obtained - food quality specialist.

RTU Olaine Technology College, based on the decision of the Council meeting of March 11, 2020, has submitted an application to the AIC on March 17, 2020, clarified by a letter of May 15, 2020 regarding the provision of additional information requesting changes to the study program implementation duration, in the content and scope of the study program. The changes made in the study program are summarized in Table 5

Table 5

Summary of changes

Nr.p.k.	*Type of change*	*Old edition*	*New edition*
1.	The volume of the study program	100 KP	80 KP
2.	Duration of studies	2,5 years	2 years
3.	Changes in the content of the study program		Study course plan and description of study courses

Changes in the content of study programs were made mostly in the compulsory and optional study courses of the field. The following study courses were developed: human anatomy and physiology, sanitation and hygiene in food companies, nutritional value of food products, sensory evaluation of food products, nutrition training, application of business professional competencies, application of ICT in food industry, innovations in food industry and expiration date, which corresponds to the Cabinet of Ministers Regulations No. 626 “Regulations on (..) and Professional Qualification Requirements Included Therein”, dated October 9, 2018, and Cabinet Regulation No. 141 “Regulations on the State Standard for First-Level Professional Higher Education”, but there is no module for the acquisition of professional competencies in entrepreneurship. Study courses such as measurement technology, food processes and apparatus in the food industry were integrated into other study courses.

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.

Table 6

Description of the program

Title of the study program	Food quality control
Code of the study program according to the Latvian education classification	41541
Type and level of study programs	1st level professional higher education study program
Qualification level (EQF)	5
Qualification level (LQF)	5
Occupation code in the classification of occupations	3119 42
Volume of study programs (CP)	80
Form, type, duration of implementation	Full-time, Latvian, 2 years
Place of implementation	Riga Technical University Agency «Riga Technical University Olaine Technology College» Zeiferta Street 2, Olaine, Olaines District, LV-2114
Study program director	Jeļena Pisarjonoka Ilze Apsīte
Admission requirements	General secondary education or 4-year vocational secondary education

The aim of the study program	To prepare level 4 professional food quality specialists for food production companies or company laboratories and/or quality control laboratories that organize and/or perform regular sampling of the external environment, raw materials, intermediate products and finished products for laboratory testing, organize and/or sample registration, chemical, microbiological analyzes in accordance with the internal quality and/or safety system developed in the company, present the results of the analyzes, compare them with the safety requirements of the standard and food products and their raw materials.
Tasks of the study program	- To ensure the acquisition of the profession, the course of the study process in accordance with the requirements of the labor market. - To provide students with an opportunity to develop skills and abilities in raising and solving professional problems. - To ensure the quality of education at such a level that it is possible to continue education in the 5th level education programs and other higher education programs. - To ensure and develop scientific research activities in the study program. - To provide and improve the infrastructure and material and technical base in accordance with the needs of the study program implementation.
Achievable results	

Knowledge	- Knows and understands food quality assurance and quality system management. - Knows and understands food production technology. - Knows food testing methods. - Knows the control of hygiene requirements in the food chain. - Knows food laws.
Skills	- Able to organize sampling of raw materials, food products and indoor environment for quality control in laboratories. - Able to perform chemical analysis and microbiological testing of food products in accordance with the requirements of standards. - Able to handle equipment and apparatus used in food control laboratories. - Able to organize and provide verification of scales and other measuring equipment, calibration of measuring containers. - Able to implement testing documentation in laboratories and plan hygiene inspections in the company.

Competence	- Able to assess the compliance of testing equipment, facilities, reagents, media and other materials with the task and quality requirements, as well as to organize their use and storage. - Able to summarize and statistically process the obtained test results. - Able to control the compliance of food quality with regulatory and technical documentation. - Able to create and maintain quality system documentation in the company, analyze food risks and plan the necessary laboratory tests.
The final examination is planned at the end of the study program	Qualification work

A sample diploma is attached in Annex 22.

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

By 2020, the increase in the number of students increased and decreased, the drop-out rate was relatively high, which can be explained by the duration of studies (2.5 years) and the need for chemistry knowledge and outdated infrastructure. Thus, decisions were made to improve the study program and reduce the amount of study programs from 100 CP to 80 CP.

In year 2020/2021 there is an increase in the number of enrolled students compared to 2019/2020 year in which there were no students. In year 2021/2022 demand for this program decreased and only 8 students were admitted. This is due to the fact that most students are workers and unable to combine studies with work and there was a Covid period when they needed vaccination certificate.

Analyzing 2021/2022 the students' desire to study only remotely, the course of the study process could not ensure it, because the study program envisages many practical works (including laboratory works), which cannot be performed remotely. Consequently, some students expressed a wish not to continue their studies.

In addition, the most common reasons for the fluctuating increase in the number of students are the desire to obtain a bachelor's degree rather than a 1st level professional higher education, thus the university study programs are preferred, and many still do not know about the new, modern infrastructure of RTU Olaine Technology College renewed in early 2020.

Graduate students who have obtained the qualification of food quality specialist can work in the

laboratories of various food production and processing companies, as well as in the structures of the Food and Veterinary Service, other state control institutions related to food quality assessment.

Potential jobs for graduates are large and medium-sized food companies and food quality control institutions. College graduates can work in such companies as AS

Food Union, SIA “Orkla Latvija”, AS “Latvijas balzams”, SIA “Fazer Latvija”, Food Safety, Animal Health and Environment Scientific Institute “BIOR”, etc.

Analyzing the employment of graduates, it can be concluded that many continue their studies at the Latvia University of Life Sciences and Technologies in food programs and at the same time work in food companies, where they previously studied at the OTC, and remained as independent employees.

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.

More information on the dynamics of the number of students is available in Tables 7 and 8.

Table 7

Number of students matriculated during the study year

Year of admission	Number of students
2014./2015.	12
2015./2016.	-
2016./2017.	9
2017./2018.	7
2018./2019.	-
2019./2020.	-
2020./2021,	9
2021./2022.	8

The demand for the study program is fluctuating, therefore it has not been possible to complete groups every study year. In recent years, it has been observed that some students start their studies after graduating from high school, but some have already started a career in the field and need education.

Table 8

Number of graduates

Academic year	Number of students
2014./2015.	15
2015./2016.	8
2016./2017.	6
2017./2018.	-
2018./2019.	4
2019./2020.	2
2020./2021,	-

There is a drop-out rate, mainly due to the inability to combine full-time study. As far as possible, the study department, in agreement with the teaching staff, compiles a list of lectures so that students can combine studies with work.

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

Not applicable

3.2. The Content of Studies and Implementation Thereof

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

The content of study courses and modules is updated regularly (every academic year) in accordance with the needs of the labor market and scientific trends. The teaching staff and the program director are responsible for updating the content of the study courses and modules, who approves the changes. If the teaching staff of the study course changes, then the existing teaching staff introduces the necessary changes in the content of the study course of the program according to their views.

Faculty members review not only the content of study courses/modules, but also the content of independent, practical and laboratory work and the number of hours required. The evaluation procedure and study literature or additional literature are reviewed, updating the latest editions.

Teachers of study courses improve their knowledge and practical skills by attending relevant in-service training events, internships in foreign companies or educational institutions (Erasmus projects) or by improving skills in internships in Latvian food companies. The teaching staff improves their digital skills, which are necessary for the organization of the remote study process, develops digital teaching aids and

literature for the acquisition of the content of the respective study course, which has very minimal sources of literature.

The study program is implemented in the e-environment (Moodle), where various digital solutions are used, such as the creation of digital tests, the placement of materials and the submission of tests. The Mykoob platform is used to post students' grades, communicate and list lectures.

The teaching staff offers students to perform/develop scientific and practical work, various practical and independent work related to food production and quality control.

It was increasingly emphasized from employers to develop/improve students' analytical thinking, argumentation and critical thinking, as well as to manage various state-of-the-art laboratory equipment that is practically not available in our educational institution. Therefore, teachers are full of content with study tours to food companies, so that students learn different technologies and understand their role in the food industry.

During their studies, students fully acquire the necessary skills in the laboratory and knowledge in chemistry and the food industry. This is also confirmed by the evaluation of the internship, as well as the employment of the graduates.

The study program is focused on the acquisition of skills in the food industry, as well as knowledge in the fields of food and chemistry. The content of the study courses is designed to provide students with knowledge, skills and competencies, as well as to develop the acquisition of research knowledge.

When developing, improving or updating the descriptions of study courses, each lecturer must take into account the

quality specialist, as well as take into account the goals of the program, the set tasks and the results to be achieved. The descriptions of the study course are developed by a lecturer who works at OTC, whose name, surname and position appear as the author of the course. All lecturers cooperated with each other to improve the content of the study course and to understand whether the corresponding topic has not been acquired in another study course.

The director of the study program provides proposals, advice to the teaching staff, as well as checks the content of the study course, the compliance of the results with the professional standard and summarizes it in a table to analyze the acquisition of knowledge, skills and competences.

Table 9

Fragment of the analysis of the results to be achieved by the study courses

Skills and attitudes required for the performance of the basic tasks and responsibilities of professional activity,
PROFESSIONAL knowledge and competencies

Competences to be tested in the standard	Study course/courses	Study course results		
		Knowledge	Skills	Comprehension
Ability to implement and maintain quality management systems in the food enterprise. Ability to update changes in the company's quality system, meeting the requirements of quality standards. Ability to assess the compliance of food quality with the requirements of binding regulatory enactments and standards at all stages of production.	Food quality and legislation	- Will know the Codex Alimentarius, the regulations of the European Union and the laws and regulations of the Republic of Latvia that form the quality control system - Will know the basic principles of HACCP	- Ability to independently describe the technological processes of products, their quality control and management system. - Ability to identify critical control points. - Ability to identify pollution risks, fill in documentation.	Understand the basic principles of quality assurance systems, the aim of which is to promote the competitiveness of Latvian food products and at the same time protect human life, health and the environment from the effects of unsafe goods.

Ability to control food safety and quality changes in the production process.	Sanitation and hygiene in food enterprises	- Will know the general hygiene requirements for the food business premises. - Will know the hygiene of the staff. - Will know the basic requirements of hygiene.	- Ability to orientate in legislation in food companies - Ability to comply with daily hygiene and sanitation measures in the food business/laboratory. - Ability to perform a hygienic assessment of the company.	Understand the basic issues of hygiene and sanitation and requirements in food companies.

Analyzing the study courses “Food Quality and Legislation” and “Sanitation and Hygiene in Food Companies” it can be concluded that the defined achievable results cover the competencies set in the food quality specialist profession standard, the study course results are focused on testing knowledge and skills, taking into account 5th level qualifications. requirements.

The study program includes the study course "Introduction to the specialty", the course has been introduced so that students:

• oriented in the environment of OTC, merged with course members;

• understand the competencies, responsibilities and job opportunities and challenges of a food quality specialist;

• know the course of the study process, the study plan for the profession to be acquired and know the organization, structure and requirements of OTC studies;

• be able to use the e-environment, get acquainted with the requirements for designing study papers;

• understand the necessity and usefulness of scientific and practical work in their profession.

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

not applicable

3.2.3. Assessment of the study programme including the study course/ module

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

The study process of the study program consists of acquiring theoretical knowledge in person, incl. independent work, and acquisition of practical skills in OTC laboratories.

The organization of the study process and the choice of methods are related to the aim of the program and the implementation of the content principles defined in the tasks and ensure the acquisition of both theoretical and practical knowledge and skills.

At the beginning of the study course, the lecturers acquaint students with the requirements for obtaining credit points, explain the course and conditions of practical, independent and laboratory work.

The training is based on general knowledge to specific, with an emphasis on learning (independent work) and student project work in a team. Various teaching methods and forms are used in the study process: lectures, seminars, practical work, laboratory work, study tours, discussions, group work, consultations, students' independent work, which is realized as course work, information search on the Internet and database creation, as well as practice reports and qualification work.

Course programs have been prepared and regularly updated and supplemented for each study course, in which the topics covered in the course, study and additional literature, as well as the forms of control of the course acquisition and the organization and tasks of students' independent work are indicated.

The assessment system of students' knowledge, skills and abilities complies with the requirements of Title IV of the Cabinet of Ministers of the Republic of Latvia Regulation No. 141 “Regulations on the State First Level Professional Higher Education Standard”. Knowledge assessment takes place in accordance with the regulations “Riga Technical University Agency“ Riga Technical University Olaine Technology College study and examination procedures ”, which was approved on January 16, 2020 at the OTC Council meeting.

The basic forms of program acquisition evaluation are an exam and a test. The examination of students' knowledge and skills is also performed by evaluating the developed independent works, the amount of which corresponds to the credit points of the study course. Independent work includes reading of compulsory (study) and additional literature, seminars, term papers, development of laboratory work protocols and evaluation of results. The requirements for the assessment of students' knowledge are formulated in the description of each study course. In the exams, students must demonstrate good knowledge of the theoretical material of the course and understanding of the course, the ability to creatively apply knowledge in independent work. The main evaluation criteria are:

- understanding and depth of knowledge;

- creative approach, linking theory and practice;

- systematicity;

- quality of seminars, midterm examinations and course work.

At the end of each semester, according to the obtained evaluations during the study process, the students' knowledge is evaluated in a 10-point system, but the final evaluation after the course:

- very high level of acquisition (10 - “excellent”, 9 - “excellent”);

- high level of acquisition (8 - “very good”, 7- “good”);

- average level of acquisition (6 - “almost good”, 5 - “average”, 4 - “almost average”);

Credit points are credited for each acquired study course and practice, if the evaluation on a 10-point scale has not been less than 4 - "almost average". The quality of the internship is determined by evaluating the internship report and its presentation with a 10-point system.

Teachers use several forms to test their knowledge, such as tests, reports, course work development and defense, tests, exams, situation analysis tasks, as well as participation in scientific and practical work.

Academic staff and administrative staff monitor the requirements and results of students' knowledge assessment. The results and methods of student assessment are discussed in the study sessions, which serve as a basis for the improvement of the study process.

At the end of the program, a state final examination is taken - a qualification exam, which is assessed on a 10-point scale and consists of 2 parts: an integrated examination (test) and a qualification paper. The qualification paper is developed and designed in accordance with the rules developed by the academic staff of OTC. The qualification paper is defended and evaluated with a mark at the meeting of the qualification commission, which is attended by specialists in the field, who evaluate the knowledge and skills acquired by the students.

The diploma for the first level professional higher education is received by the student who has mastered the program and passed the qualification exam, obtaining a grade of not less than “4” - “almost average”.

3.2.4. If the study programme envisages an internship, describe the internship opportunities offered to students, provision and work organization, including whether the higher education institution/ college helps students to find an internship place. If the study programme is implemented in a foreign language, provide information on how internship opportunities are provided in a foreign language, including for foreign students. To provide analysis and evaluation of the connection of the tasks set for students during the internship included in the study programme with the learning outcomes of the study programme (if applicable).

The study program envisages two internships, the first internship is in the 2nd semester of the 1st year (6 CP), the duration of the internship is 6 weeks and the second internship is in the 4th semester of the 2nd year (10 CP), the duration of the internship is 10 weeks.

The student decides in which company he/she wants to acquire an internship that is related to the food industry, informs the program director and the study department. If necessary, the study department contacts the companies about the possible internship and notifies the student if the company agrees to offer an internship place.

During Covid, the study department of OTC helps to provide the student with an internship place based on the student's wishes. OTC administration and practice managers regularly meet with the company's employees and industry representatives to find out current events in the industry and needs, needs for training new employees and raising the qualification of existing employees. Together with the company managers, the internship places are identified, the skills and abilities required for the interns are discussed, and the desired time for attracting the interns is discussed.

During the internship, students are provided with the opportunity to improve their theoretical and practical skills in companies, to create and develop independent professional competencies in the company's laboratories, production stages and documentation analysis.

The director of OTC, the internship company and the internship sign an internship agreement. For the successful course of the internship and the leader of the management internship, the internship tasks are developed, which includes the purpose of the internship, the tasks and the content of the internship, as well as information about the duration of the internship and the creation of internship documentation.

During the internship, the student has two internship supervisors: in the company and in the educational institution. Practice supervisors help the student to understand the essence of the practice tasks and guide them to the correct completion of these tasks through counseling. The head of the internship from OTC also provides consultations on general issues of internship organization and defense of the internship report.

The internship program and the tasks included in it allow to provide practical knowledge and skills in food industry companies, as well as analytical thinking, quality management system and the ability to use mathematical thinking to make predictions (industry, field, profession), provide arguments, test and compare solutions.

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

not applicable

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

The student of the program “Food Quality Control” develops a qualification paper in the 4th semester of the 2nd year (8 CP). Qualification work is an independent work of a student, after which he/she obtains a professional qualification in the respective field. When developing a qualification paper, the student deepens, systematizes and strengthens the acquired knowledge. It is developed in accordance with the OTC Student Paper Design Regulations.

The student usually chooses the topic of the qualification paper based on the possibilities of the internship place, discusses it with the supervisor of the qualification paper from OTC and also coordinates the head of the study program. The supervisor coordinates the topic qualification work

from the OTC together with the managers of the student internship companies, in accordance with the most current trends in the industry and the labor market. The qualification work is the final stage of obtaining the 1st level professional qualification. On the basis of defending the qualification paper, a first-level professional higher education diploma is awarded. Completion of the qualification paper is based on the knowledge, skills and abilities acquired during the acquisition of the study program. The task of the qualification practice includes a section on the collection of specific materials on current topics. The content and scope of the qualification paper must comply with the sections of the professional standard and their requirements. The qualification work (research work) consists of a literature review, research part, economic part (SWOT analysis), quality management system, work and environmental safety part.

Analyzing the topics of the final work, it can be concluded that they are related to current events at the company level and the food industry level. Below the table "Themes of final qualification papers" there are examples of qualification papers with assessments chosen by students and approved.

Table 10

Topics of final qualification papers

Name, surname	*Qualification paper theme*	*Valuation*	*Year*
Person 1	Quality control in the production of linseed oil	9	2018
Person 2	Quality control in the production of pork sausages	8	2018
Person 3	Drinking water quality control	8	2018
Person 4	Quality control in the production of ice cream with cherries	8	2018
Person 5	Quality control in the production of blackcurrant liqueur wine	6	2019
Person 6	Drinking water quality control in Olaine region	7	2019

The results of the qualification works of the students of the program (Figure 3) indicate the good readiness of the students.

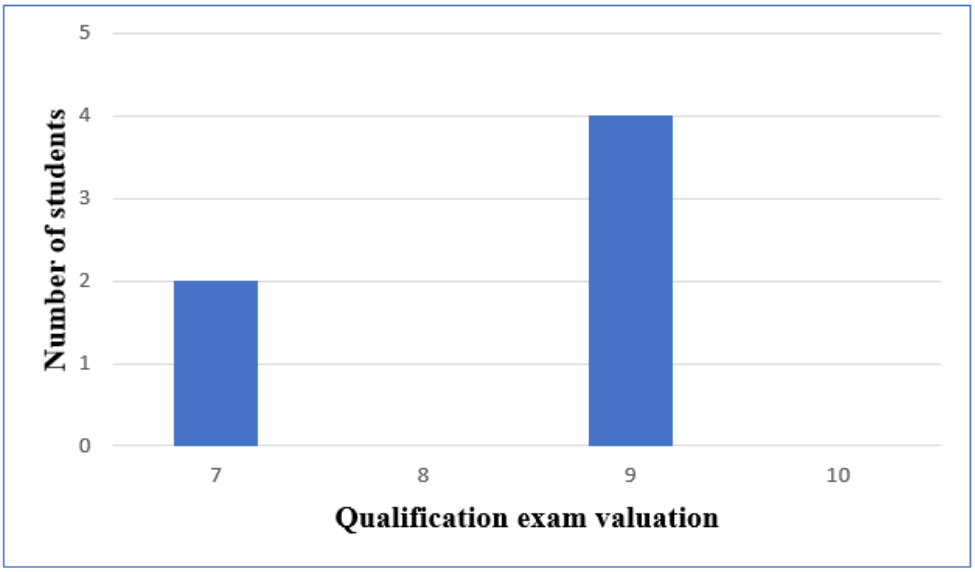

Figure 3. The results of the qualification examinations of the academic year 2016/2017 in study program “Food Product Quality Control”

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.

Part II, Items 2.3.1. - 2.3.3.

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).

1. Source of financing of the study program - state budget grant from the general revenue for the provision of studies

Based on the study costs in 2022, funding of 99,635 euros is available in the thematic area “Production and Processing”, including 6300 euros scholarships.

Costs per student 4666.80 euros, broken down by:

• The base cost of the study place is 1,630.11 euros (one thousand six hundred and thirty euros and 11 cents), at the optimal coefficients of “2.7” in 2022 and 100% security - 4401.30 euros, or 94.3%

• Calculated financing for the social security of the study place in professional study programs - 251.98 euros, or 5.4%

• sports, culture, service hotel costs 13.52 euros, or 0.3%

The number of study places financed from the state budget in 2022 in the program in 2022 is 20 and this is the minimum number of students to provide rehabilitation of the study program.

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.

A total of 17 lecturers are involved in the implementation of the study program, of which 3 lecturers or 18 % and 14 visiting lecturers or 82 % are employed in the main work of OTC.

3 doctors of sciences and 11 lecturers with a master`s degree participate in the implementation of the study program.

The academic staff performs teaching, methodological and scientific work. Within the framework of the study work, he gives lectures, conducts seminars and practical classes, accepts examinations, reports, regular assignments (incl. Tests, etc.), organizes consultations, conducts and reviews qualification papers, performs other work duties related to the organization of the study paper.

Lecturers involved in the accredited program have the necessary skills to transfer their knowledge and experience to students and receive feedback on their work. All lecturers are provided with the opportunity to supplement their knowledge, participate in in-service training courses, study for a doctorate, work in research and practice abroad, within the framework of exchange programs, as

well as publishing their articles in collections of scientific articles.

The implementation of the study program is ensured by 17 lecturers with whom an employment contract has been concluded. During the reporting period, there have been qualitative changes in the composition of the teaching staff. Changes in the composition of the teaching staff have had a positive effect on the quality of studies, as evidenced by the results of the survey of students and graduates, providing a positive assessment of the lecturer's work.

The policy of the College is to ensure that all study courses are taught by qualified, scientifically and methodically trained teachers who use modern teaching methods. Most lecturers, including lecturers of specialized courses, have significant practical experience in the relevant field of activity, thus ensuring the compliance of the specialized knowledge, skills and competencies acquired in the study program with the acquired qualification and use in further professional activities. The main criteria for the selection of lecturers are education (degree), professional experience, research and creativity and communication skills. The knowledge of the state language of the academic staff employed in the study program complies with the regulations on the amount of knowledge of the state language and the procedure for testing the state language proficiency for professional and official duties and allows any course of study to be taught in the state language.

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, several teachers have changed. Teachers of branch study courses have terminated their employment with OTC, and new, professional and qualified teachers have been found instead.

OTC concludes that these changes have had a positive effect on the quality of studies - firstly, it has been possible to balance the workload and find a suitable lecturer for each study course, and secondly, new professionals with extensive previous experience have been involved in teaching OTC study courses. The attraction of new lecturers has allowed to improve the quality of the respective study courses, as well as to give students more knowledge based on the previous professional and academic experience of the lecturers.

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

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 teaching staff of the study program cooperates by preparing descriptions of study courses, creating e-courses in the e-environment, working in research directions and projects.

For example, if some teachers lead one study course for different groups, they agree on the course content, course requirements, bibliographic sources and description of independent work.

In order to promote the co-operation of the teaching staff in the organized in-service training events, international events and also informal events, a study of common tasks is organized.

Teachers are also invited to take part in ERASMUS + experience exchanges by going to ERASMUS + Member States, getting to know the experience of other universities, as well as participating in the learning process.

As of September 1, 2021, there are 16 students in the study program “Food Product Quality Control”, while seventeen lecturers are involved in the implementation of the study program.

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	NR_22_pielikums_Diploms_ENG.zip	NR_22_pielikums_Diploms_LV.zip
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	NR_23_pielikums_ENG.docx	NR_23_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	NR_28_pielikums_ENG.docx	NR_28_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)	NR_29_pielikums_ENG.docx	NR_29_pielikums.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	Nr_27_pielikums_ENG.docx	NR_27_pielikums.docx
The curriculum of the study programme (for each type and form of the implementation of the study programme)	NR_24_pielikums_Studiju_plans_ENG.doc	NR_24_pielikums_Studiju_plans_LV.doc
Descriptions of the study courses/ modules	Nr_25_pielikums.zip	NR_25_pielikums_Studiju_kursi_LV.zip
Description of the organisation of the internship of the students (if applicable)	NR_26_pielikums_Prakses_apraksts_ENG.zip	NR_26_pielikums-Prakses_apraksts.zip
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)		