APPLICATION

Study field "Information Technology, Computer Hardware, Electronics, Telecommunications, Computer Management, and Computer Science" for assessment

Study field	*Information Technology, Computer Hardware, Electronics, Telecommunications, Computer Management, and Computer Science*
Title of the higher education institution	*Rīgas Tehniskā koledža*
Registration code	*3397002057*
Legal address	*BRASLAS IELA 16, VIDZEMES PRIEKŠPILSĒTA, RĪGA, LV-1084*
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Self-evaluation report

Study field "Information Technology, Computer Hardware, Electronics, Telecommunications, Computer Management, and Computer Science"

Vocational education competence center "Riga Technical College"

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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,.

Riga Technical College (hereinafter referred to as **RTC**) is a state-founded professional higher education institution under the supervision of the Ministry of Education and Science of the Republic of Latvia. It provides individuals who have obtained secondary education with the opportunity to obtain short-cycle (first-level) higher professional education, which corresponds to the fifth level of professional qualification in the Latvian Qualifications Framework, in accordance with Articles 1, 4, and 5 of the Professional Education Law. SP code, first-level higher professional education study programs.

The legal status of RTK is a state direct administrative institution.

Registration number in the Register of Educational Institutions: 3347002057

Registered address: Braslas iela 16, Riga, LV-1084

According to the amendments to the Law on Vocational Education, which entered into force on 01.04.2022, RTK does not have a branch, but a place of implementation of educational programs. The Vocational Education Law does not give colleges the right to create branches within the meaning of the Law on Higher Education - i.e. structural units that have some organizational autonomy, but in accordance with Article 15, Part 3, the college, in coordination with the founder - the Ministry of Education and Science, can create places for the implementation of educational programs. Unlike the branches defined in the Higher Education Law, RTK educational program implementation sites do not have their own organizational independence, separate personnel and material and technical base. They do not carry out economic activity, but by their nature could be compared to representative offices within the meaning of the Higher Education Law, because they were created in cooperation with the state's regional technical schools, are located in their premises, and in them, a small number of individual lectures included in the course of study, which do not require specialized laboratories or other specific material and technical equipment and which can be visited by residents of the region and students of technical schools in order to familiarize themselves with the study process and to interest the students and residents of the regional technical school in continuing their studies at RTK.

Locations where the programs are carried out (Article 15, third part of the Professional Education Law, letter of the Ministry of Education and Science dated 29.12.2022., No. 4-9.2e/22/3612):

- Lēdmanes iela 3, Riga
- Strādnieku iela 16, Daugavpils
- Valteru iela 6, Kandava
- Ventspils iela 51, Liepaja

The structure of the college with the places of implementation of the programs can be found in the appendices .1. – LV and 1.2. – EN.

„Development and investment strategy for 2021-2027" has been developed at Riga Technical College. See in appendices 30.1. – LV and 30.2. – EN or https://www.rtk.lv/?sadala=203

RTC mission

To provide quality, dynamic and competitive vocational education and raise vocational qualification in engineering and technical (STEM) specialties throughout life in accordance with labour market requirements.

RTC vision

To become the leading STEM discipline and inter-discipline college in Latvia – guaranteed growth for qualified professionals.

Strategic objectives of RTC

- To offer and implement educational programmes in accordance with the development trends of the national economy and modern-day education
- To ensure a quality educational process involving competent educators who are oriented towards consistently raising their qualifications and motivated students who are oriented towards acquiring education
- To provide opportunities for workers in the economic sector, other applicants and RTC teaching staff to acquire modern vocational education and raise their professional qualification

At RTC, after obtaining secondary education, one can acquire short-cycle (level 1) higher professional education that corresponds to the fifth level of professional qualification framework in Latvia, according to Sections 1, 4, and 5 of the Vocational Education Law, in 10 study programs and 5 study fields.

Fields of studies	SP code – first-level higher professional education study programs
17. Information technology, computer engineering, electronics, telecommunications, computer management and computer science	41 483, Information technologies
	41 523, Electronics
	41 523, Telecommunications
18. Mechanics and Metalworking, Thermal Energy, Thermal Technology, and Mechanical Engineering	41 521, Engineering mechanics (acquired qualifications - mechanical engineer, mechatronics specialist)
	41 522, Thermal Energy
	41 526, Refrigeration Equipment
	41 526, Automotive transport
19. Energetics, Electrical Engineering, and Electrical Technology	41 522, Electrical equipment
20. Production and processing	41 543, Woodworking
26. Transport Services	41 345, Telematics and Logistics

All study programs are implemented only in Latvian.

All study programs are implemented in Riga, but to meet the needs of employers and municipalities in regions, we offer studies in program implementation places in Daugavpils, Kandava, and Liepaja.

The structure of the college with the places of implementation of the programs can be found in the appendices 1.1. – LV and 1.2. – EN.

Most of the students who start their studies already have a paid job, mainly in the industry in which they want to enhance their knowledge and skills. Thus, RTC provides them with an opportunity to obtain higher education and/or further education without interrupting their employment relationships.

The number of students studying in level 1 higher professional education programs was quite stable from the academic year 2009/2010 to 2013/2014. Due to the worsening demographic situation in the country, the total number of students has decreased since 2014/2015. The number of self-financed students has significantly decreased.

The number of students studying in RTC program implementation places has increased on average by 15% since their establishment until 2019, while decreasing slightly in Riga. From the 2019/2020 academic year, the number of students in program implementation places has decreased on average by 20% each year, but by 10% overall in the college. The decrease in the number of students is explained by a significant decrease in the number of residents aged 20 to 29, according to statistics, as well as the impact of the Covid-19 pandemic.

Academic year	**2013 /2014**	**2014 /2015**	**2015 /2016**	**2016 /2017**	**2017 /2018**	**2018 /2019**	**2019 /2020**	**2020 /2021**	**2021 /2022**	**2022 / 2023**
Number of students	766	746	696	726	725	676	598	580	480	422
Including self-financing	162	99	74	121	57	26	16	30	28	14

Number of students in locations of program implementation

Academic year	**2013 /2014**	**2014 /2015**	**2015 /2016**	**2016 /2017**	**2017 /2018**	**2018 /2019**	**2019 /2020**	**2020 /2021**	**2021 /2022**	**2022 / 2023**
Number of students	96	112	143	179	212	224	190	128	121	63
Including self-financing	13	15	21	25	29	33	32	3	13	0

Student number dynamics in programs:

- **“Information technology”**

Academic year	2013 /2014	2014 /2015	2015 /2016	2016 /2017	2017 /2018	2018 /2019	2019 /2020	2020 /2021	2021 /2022	2022 / 2023
Number of students	133	141	122	114	117	133	125	118	97	90
Including self-financing	17	19	18	16	16	20	21	4	11	6

- **“Electronics”**

Academic year	2013 /2014	2014 /2015	2015 /2016	2016 /2017	2017 /2018	2018 /2019	2019 /2020	2020 /2021	2021 /2022	2022 / 2023
Number of students	43	41	35	29	24	27	17	10	0	0
Including self-financing	6	6	5	4	3	4	3	0	0	0

- **“Telecommunications”**

Academic year	2013 /2014	2014 /2015	2015 /2016	2016 /2017	2017 /2018	2018 /2019	2019 /2020	2020 /2021	2021 /2022	2022 / 2023
Number of students	53	42	42	33	24	9	4	0	0	0
Including self-financing	7	6	6	5	3	1	1	0	0	0

- **“Electrical equipment”**

Academic year	2013 /2014	2014 /2015	2015 /2016	2016 /2017	2017 /2018	2018 /2019	2019 /2020	2020 /2021	2021 /2022	2022 / 2023

Number of students	82	92	100	137	140	120	121	140	101	91
Including self-financing	11	12	14	18	19	18	20	2	8	1

- **“Thermal energy”**

Academic year	**2013 /2014**	**2014 /2015**	**2015 /2016**	**2016 /2017**	**2017 /2018**	**2018 /2019**	**2019 /2020**	**2020 /2021**	**2021 /2022**	**2022 / 2023**
Number of students	58	48	49	57	56	28	25	22	22	20
Including self-financing	8	6	7	8	8	4	4	0	5	0

- **“Refrigeration equipment”**

Academic year	**2013 /2014**	**2014 /2015**	**2015 /2016**	**2016 /2017**	**2017 /2018**	**2018 /2019**	**2019 /2020**	**2020 /2021**	**2021 /2022**	**2022 / 2023**
Number of students	0	31	36	37	45	34	31	44	41	46
Including self-financing	0	4	5	5	6	5	5	0	1	2

- **“Automotive Transport”**

Academic year	**2013 /2014**	**2014 /2015**	**2015 /2016**	**2016 /2017**	**2017 /2018**	**2018 /2019**	**2019 /2020**	**2020 /2021**	**2021 /2022**	**2022 / 2023**
Number of students	170	140	126	132	118	120	102	99	72	64
Including self-financing	22	19	18	18	16	18	17	15	11	3

- **“Engineering mechanics”**

Academic year	2013 /2014	2014 /2015	2015 /2016	2016 /2017	2017 /2018	2018 /2019	2019 /2020	2020 /2021	2021 /2022	2022 / 2023
Number of students	95	92	75	86	102	122	104	75	77	67
Including self-financing	12	12	11	12	15	17	16	3	2	1

- **“Woodworking”**

Academic year	2013 /2014	2014 /2015	2015 /2016	2016 /2017	2017 /2018	2018 /2019	2019 /2020	2020 /2021	2021 /2022	2022 / 2023
Number of students	33	22	9	20	21	12	15	15	12	14
Including self-financing	4	3	1	3	3	2	3	1	0	1

- **“Telematics and logistics”**

Academic year	2013 /2014	2014 /2015	2015 /2016	2016 /2017	2017 /2018	2018 /2019	2019 /2020	2020 /2021	2021 /2022	2022 / 2023
Number of students	73	70	74	58	56	53	61	56	31	19
Including self-financing	10	9	11	8	8	8	9	4	1	0

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.

1.2. **The representation, management, and decision-making institution of RTC is the College Council** (hereinafter referred to as the Council), the college director (hereinafter referred to as the Director), and the internal audit commission (hereinafter referred to as the Audit Commission).

The management structure of the college can be found in appendices 2.1.- LV and 2.2.- EN.

The Council is a collegial management and decision-making institution of RTC personnel. The Director is the highest official of the college who implements the general administrative and economic management of the college and represents the college without special authorization. The Ministry of Education and Science is the highest management and decision-making institution of RTC in strategic, financial, and economic matters.

The Council consists of 15 members:

- Director
- Deputy Director
- Six representatives of academic staff (RTC is their primary place of employment)
- Two representatives of technical staff.
- Three representatives of student self-government.
- Two authorized representatives delegated by employers or professional organizations or the Tripartite Cooperation Sub-Council for Professional Education and Employment.

The Council approves the long-term and medium-term operational strategy of RTC, study programs, research directions, develops proposals for student admissions and the implementation of new study programs, decides on the establishment, reorganization, and liquidation of structural units, approves their regulations, approves regulations on academic and administrative positions at the college, approves regulations on the procedures for studying and testing at the college, approves the audit commission and its regulations, approves internal rules and regulations, accepts the audit commission's report, accepts the director's report, supports and promotes student self-government activities, harmonizes student self-government regulations, and decides on other issues.

The Director hires and dismisses academic and general staff at RTC, approves the appointment of deputy directors, issues binding orders to staff, decides on the rational use of RTC resources within their authority, organizes audit committees, academic and administrative staff elections, submits annual reports on RTC's activities to the Council and the Ministry of Education and Science, and ensures that staff have access to them. They are responsible for the use of RTC financial resources and perform other tasks.

The audit committee is elected by RTC staff in a closed election and consists of three people. The committee includes one elected representative of the academic staff, one elected representative of the general staff, and one elected representative of the student self-government. Only members of the respective categories of staff can be elected to the audit committee. The committee cannot include employees in administrative positions or on the Council.

The audit committee has the right to verify compliance with regulatory acts, regulations, decisions of the Council and Director, and access all documents related to RTC's financial and economic activities.

See Appendix 32.1 of the "Regulations of the Riga Technical College Council" (12.06.2007 No. 16-IZM). - LV and, in Appendix 32.2. - EN.

"Regulations of the Audit Commission" (14.10.2002 - RTK), see Appendix 7.1 - LV and 7.2. - EN.

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.

1.3. **The goal of quality management is to ensure that RTC operates in accordance with the development strategy, external and internal regulatory documents, contractual obligations, and the requirements of clients and employers.**

RTC quality policy (07.06.2022. No. 1.1.-2/7-RTK) see in attachments 33.1., 33.1.1, 33.1.2., 33.1.3., 33.1.4., 33.1.5. – LV un 33.2., 33.2.1., 33.2.2., 33.2.3., 33.2.4., 33.2.5 – EN.

It is focused on implementing the mission, achieving strategic goals, sustainable operation, developing quality management and assurance systems, and achieving the principles of quality in studies, research, and collaboration with society.

Quality policy shapes the framework for RTC's development and investment strategies, and sets overall intentions and directions for ensuring and improving the quality of studies.

The goal of the quality policy is to promote the development of RTC by continuously improving quality and defining the principles and organizational processes for its implementation.

The following basic principles are taken into account when implementing the quality policy:

- **Competence** - the quality of RTC's activities is ensured by employees with professional knowledge and skills, accumulated experience, and continuous professional development, guaranteeing students the opportunity to receive quality education.
- **Partnership** - effective long-term collaboration with employers and other stakeholders in the STEM field at the local and international level.
- **Sustainability** - active and responsible action in education for sustainable development in response to society's needs.
- **Participation** - involvement of students in the improvement of the educational process, and participation of teachers and staff in the development and maintenance of quality management systems.

The basis of RTC's sustainable development is the EFQM (European Foundation for Quality Management) excellence model, whose main components are leadership and management, personnel strategy, partnerships and resources, processes, products and services, as well as the main performance results of personnel (including students) and society. The excellence approach ensures process planning, implementation, verification, evaluation of results, and further improvement.

The EFQM model of excellence in Latvia is successfully used in their work by state administrative institutions, many educational institutions, as well as other organizations. It is supervised by the Latvian Quality Society.

Only in Latvian:

https://www.kvalb.lv/efqm/efqm-zinas/params/post/2209325/efqm-izcilibas-modelis-2020/(in Latvian)

https://tap.mk.gov.lv/valsts-parvaldes-politika/kvalitates-vadiba/Kvalitates-vadibas-modeli/EFQM-izcilibas-modelis/ (in Latvian)

https://www.trusteddecisions.com/lv/wiki/efqm-modelis/ (in Latvian)

https://profizgl.lu.lv/mod/book/view.php?id=23319&chapterid=7110 (in Latvian)

https://biznesam.lv/izdevumi/efqm-izcilibas-modelis-biznesa-organizacijam/ (in Latvian)

The excellence approach ensures process planning, implementation, verification, evaluation of results and further development. The model is based on the Sustainable Development Goals of the United Nations.

https://www.un.org/sustainabledevelopment/sustainable-development-goals/

The full name of the model is the European Foundation for Quality Management Excellence model (www.efqm.org). Excellence models are quality management models that cover all the activities of the organization and evaluate them in a unified system. It was developed in 1992 as a framework of evaluation criteria for the European Quality Award.

The RTC quality management and assurance system is an organized structure of responsibilities, actions, and resources that together create methods and systems to ensure a high-quality, science-based, and internationally recognized study process, which provides the economy and society as a whole with competent and internationally competitive professionals.

The RTC quality management and assurance system consists of interrelated subsystems:

- Work planning and organization management systems.
- Work execution management systems.

RTC's development and investment strategy and its appendices form the basis of work planning. In addition, RTC develops detailed action plans that identify, describe, and initially structure the activities necessary to achieve RTC's goals.

Organization management, in turn, is the process of defining the sequence of actions and sub-actions, and their performers, implementation, and change management. Currently, both action planning and management are based on the organizational structure of RTC, determining the sequential actions, their sub-actions, performers, necessary resources, implementation method, deadlines, mutual interaction, which together create a comprehensive process structure that determines how organizational units operate and interact to achieve the predefined goals of this collaboration in the most effective way.

At the core of the RTC quality management and assurance system are eight quality management principles necessary for continuous improvement of the study process, staff motivation, ensuring customer requirements and positive impact on society:

- **Customer focus** - RTC depends on its customers, so it is necessary to understand both their existing requirements and their future needs, ensuring their fulfillment while trying to exceed customer expectations.
- **Leadership** - the development and investment strategy determines the general goals and ways to achieve them.
- **Employee involvement** - RTC is organized in a work environment that allows each employee to participate in achieving goals.
- **Process orientation** - all activities are managed as a unified process.
- **System management** - a clear process system has been established and is being managed to increase the effectiveness of goal achievement.
- **Continuous improvement of work** - continuous improvement of work takes place by constantly analyzing the implementation of processes and customer requirements.
- **The effective decision-making** – the decisions are made based on a logical analysis of data and information.
- **Mutually beneficial relationships with employers and social partner organizations** – increases the opportunities to achieve better results.

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.	RTK has developed and implemented a Quality Policy, which is publicly available on their website at https://www.rtk.lv/?sadala=5082 (or see point 1.2. in Annex 33.1 - LV and 33.2. - EN). Surveys of students, lecturers and employers are conducted every year. At the end of the academic year, an annual evaluation of teachers' work takes place. Problems are identified and resolved in a timely manner.
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 study programs is regulated by internal normative documents: "Procedures for the development and submission of study programs for approval" (05.12.2023. No.1.1.-2/25-RTC See Appendix 29.11.-LV and 29.2.-EN "Procedures for the development and updating of course descriptions" (05.12.2023. No.1.1.-2/26-RTC) See Appendix 41.1.-LV and 41.2.- EN
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.	Governed by internal regulations – "Principles and Procedures for Evaluating Higher Professional Education" (12.10.2023. No.1.1.-2/15-RTC) See Appendix 34.1.-LV and 34.2.-EN If a student has already studied at a higher education institution, his achievements can be recognized in the process of studying at the RTC. RTC has developed an internal regulatory document "Procedure for recognition of previously studied study courses" (20.12.2023, No. 1.1.-2/32 - RTK) (see Appendix 54.1- only in latvian)
4.	Internal procedures and mechanisms for assuring the qualifications of the academic staff and the work quality have been developed.	Governed by internal regulations for „Annual Evaluation of Teaching Quality." (07.12.2023. Nr.1.1.-2/28 – RTC) See in attachments 35.1.,35.1.1., 35.1.2., 35.1. – LV un 35.2., 35.2.1., 35.2.2., 35.2.3. - EN

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.	The Student Performance Database is continuously reviewed by the Quality Assurance Office. And performance analysis is conducted at the end of each semester. Graduate surveys on further education and employment are conducted annually. Student and teacher surveys are conducted annually to identify problems.
6.	The higher education institution/ college shall ensure continuous improvement, development, and efficient performance of the study field whilst implementing their quality assurance systems.	According to the Quality Management System (see Annex 33), desired outcomes are achieved through enhancers, which are continuously improved based on the results achieved.

2.1. Management of the Study Field

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

The aim of the study field: To offer and implement educational programmes in accordance with the development trends of the national economy and modern-day education

This is related to the RTC Development and Investment Strategy 2021-2027 strategic program's first objective. – the first goal of the strategic program for 2027. (see Annex 30.1.)

Implementation and development of the study direction is one of the priorities of the institution in accordance with the trends of the Latvian and EU labor market The development of information and communication technology infrastructure and its effective use promotes the socio-economic growth of the country.

The quality and further development of the study direction and study programs are closely related to employers who are involved in the development of study programs, profession standards, and the updating of the profession classifier.

Employers highly appreciate the institution's work in implementing the study direction and preparing new specialists. Specialists are in high demand, and companies are willing to participate in the study process to provide the latest knowledge and skills on the latest technologies, to help students successfully enter the labor market and work in the interests of companies. Short-cycle professional higher education is an important tool in the growth of Latvia's economy, especially for

the development and improvement of engineering programs, including information and communication technology and electronics. It is important to provide opportunities for obtaining professional higher education with a practical approach in a short period of time.

As information and communication technologies are developing very rapidly, the study programs included in the study direction must be improved in cooperation with employers. Unfortunately, we have not yet agreed on further solutions for the development of the study programs "Telecommunications" and "Electronics". The rapid development of information and communication technologies and weak knowledge of reflective subjects in exact sciences have been the basis for the rapid decline in the number of students in the mentioned study programs.

We plan to develop the study program "Information Technology" with two possible qualifications, "Computer System and Network Administrator" and "Information System Security Specialist". The new qualification module was developed based on the rapid increase in demand for information technology security specialists.

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.

In terms of studies, one study program is currently being implemented - "Information technologies". SWOT analysis of the study program was carried out to identify the main advantages and disadvantages of the study program. It was carried out in various ways, including discussions with lecturers, employers and industry representatives involved in the study program, collected feedback from practice managers and used the results of student and graduate surveys.

SWOT analysis of the study field

Strengths	Weaknesses

• Experienced and qualified lecturers work in the study program. • Good contacts with employers in Latvia and the EU, as well as cooperation with industry associations: LIKTA, LETERA, LTA, LEEA. • Graduates of the study program are in demand and competitive in the labor market. • RTC is the TOP 1 college in the Prakse.lv's annual survey of employers. • A material and technical base that meets modern requirements and is constantly being improved. • The possibility to use the latest electronically available sources of information in studying the study program. • International cooperation – ERASMUS+ student mobility internships in industry companies in Spain, Malta, Lithuania, etc. • Good cooperation with educational institutions in Latvia and the EU, tapping lecturers in the field of IT	• Study program applicants in some cases have weak knowledge in exact subjects. • A small number of lecturers with doctoral degrees in the study program. • E-learning opportunities are insufficiently used. • The internship of study program lecturers in companies is insufficient.
Opportunities	**Threats**
• The labor market is rapidly developing and the demand for IT specialists is growing. • The sector of electronic and optical equipment production, information and communication technology (hereinafter - EIKT) is one of the most exportable with high added value. • Good feedback from graduates of the study program and employers. • Lecturers and students of the study program have ample opportunities to get involved in international projects.	• Emigration of young people and qualified IT specialists. • The material and technical base in the field of IT is quickly becoming obsolete. • Due to insufficient funding for higher education, it is difficult to attract new and qualified lecturers, including industry professionals and doctors of science, as well as to restore the material and technical base in the field of IT. • Wide opportunities to learn IT study programs abroad

In order to prevent threats, we continue to develop a flexible organization of the study process, expanding e-study opportunities, which allow us to tap lecturers and specialists in the implementation of the study program from IT companies and other educational institutions in Latvia and abroad.

In order to give students the opportunity to learn the latest technologies in the field of IT, students are sent to work environment-based studies at institutions in Latvia and abroad. In order to prepare more specialists in the field of IT, in accordance with the requirements of the labor market, we plan to open admissions for the qualifications "Information systems security specialist" and "Telecommunications specialist". It will also be possible to increase the attraction of applicants to the study program by offering self-financed studies.

In order to develop the study direction "Information technologies, computer engineering, electronics, telecommunications, computer control and computer science", we plan to combine the study program "Electronics" with the study program "Engineering mechanics", offering the acquisition of a modern qualification "Robotics specialist".

Good feedback from graduates of the study program and employers motivates us to continuously

improve the quality of studies, raise prestige, promote competitiveness and recognition among other educational institutions. Study course development plan project

Project for the development plan of the study field.

No.	Study programm	Results	Deadline
1.	Information technology	Two qualifications:: • Administrator of computer systems and computer networks. • Information systems security specialist.	By September 1, 2026, start admission to the qualification "Information systems security specialist"
2.	Information technologies (the study program is combined with the study program "Telecommunications")	Three qualifications: • Administrator of computer systems and computer networks. • Information systems security specialist. • Telecommunications specialist.	By September 1, 2028, start admission to the qualification "Telecommunications specialist"
3.	Electronics (the study program is combined with the "Engineering Mechanics" study program)	Three qualifications: • Mechanical engineering specialist. • Mechatronics engineer. • Robotics specialist.	By September 1, 2028, start admission to the qualification "Robotics specialist"

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

The study direction management scheme can be found in appendices 49.1.– LV and 49.2.– EN.

The field of study "Information technology, computer engineering, electronics, telecommunications, computer management and computer science" is implemented in the Department of Information

and Communication Technologies of RTK.

Its head is the head of the mentioned department. The manager cooperates with study program directors, as well as with structural units supporting the study process:

- Personel Department - lecturers are involved in the study process.
- Study Department - in maintaining, motivating, organizing the study process, etc.
- Department of Foreign Affairs – students and lecturers are involved in ERASMUS+ projects.
- IT collateral Department – in equipping computer classrooms with IT technologies and their regular renewal.
- Farm Department – in solving economic issues.

The main tasks of study program directors are to attract students, motivate them, eliminate shortcomings in the implementation of the program and develop the program according to the requirements of the labor market. Initially, there were three study programs "Information technologies", "Telecommunications" and "Electronics", which were managed by separate study program directors.

Currently, one program "Information technologies" is being implemented. The aim is to further develop the program with two qualifications: "Computer systems and computer network administrator" and "Information systems security specialist".

A plan has been developed for the development of the closed study programs "Electronics" and "Telecommunications" in accordance with the requirements of the labor market.

Cooperation between the head of the study direction and the program director has become effective, because the study program director can spare more time for issues related to the successful implementation of the program. Cooperation with teachers and students is going well.

Together with the Department of Studies, solutions are being sought for maintaining the student contingent, improving the quality of studies and further development of study programs.

Together with the Department of Foreign Affairs, Erasmus+ internships and learning opportunities for lecturers, lecturer mobility and internship mobility students are planned.

The head of the department of information and communication technologies, together with the department of IT security and the department of management, solves the issue related to the improvement of study rooms and equipping them with the necessary equipment.

In cooperation with the Personnel Department, issues regarding the recruitment of lecturers and their professional growth are being addressed.

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.

As many RTC students already have some higher education or have completed a part of it, at the

beginning of each semester, the information in the submitted documents is compared with the requirements of the relevant study program. Results achieved in the corresponding study course of the previous education are recognized if the number of credit points indicated is not less than the number of credit points planned for the corresponding program's study course in one semester. In individual cases, if the study course titles are not appropriate, students must submit course descriptions.

RTC has developed an internal regulatory document "Regulation on the recognition of study results achieved in previous education or professional experience" (12.10.2023., Nr.1.1.-2/18 – RTK).

See in attachments 36.1., 36.1.1., 36.1.2., 36.1.3. – LV un 36.2., 36.2.1., 36.2.2., 36.2.3. – EN.

The regulation on recognition of study results achieved in previous education or professional experience can be found by logging into the electronic platform MOODLE.

Applicants who wish to study at RTC and have completed secondary education must submit documents certifying their secondary education. Outside the competition, full-time students are admitted for state budget funding, who have been ranked in the top three in international and national Olympiads in mathematics, physics, computer science, Latvian language or a foreign language in the last three years.

Applicants who have obtained a related vocational education and passed the state professional qualification exam with a score of "7" or higher receive an additional 2 points.

In case of an equal number of points, preference is given to persons with low-income status (by submitting relevant documents).

Applicants for full-time studies at the College are enrolled through a competition based on:

1. The total number of points obtained from two state exams

- in Latvian language,
- mathematics or Physics, or English language

total number of points acquired according to the table:

State exam levels	Points	Total number of points, if the coefficient for the state exam in mathematics is k=2.	Total number of points, if the coefficient for the state exam in physics is k=1.5.	Total number of points, if the coefficient for the state exam in Latvian language and a foreign language k=1.
A	5	10	7.5	5
B	4	8	6	4
C	3	6	4.5	3
D	2	4	3	2

E	1	2	1.5	1
F	0	0	0	0

1. After extracting the average grade from the transcript (grade = points), adding them up.

Candidates who have obtained secondary education until 2004 or abroad, or are individuals with special needs who have received medical exemptions from state exams, participate in the general competition. In these cases, the total number of competition points is calculated by adding:

- the average grade of the diploma;
- the score of two exams (if they are specified) or the scores of two final evaluations, at the choice of the candidate, using the attached Table 1:

Table 1

Final evaluation of an exam (marks)	**Marks (points) In Latvian language**	**Marks (points) In foreign language**	**Total number of points in mathematics (Coefficient k=2)**	**Total number of points in physics (Coefficient k=1.5)**
9 - 10	5	5	10	7.5
7 - 8	4	4	8	6
6	3	3	6	4.5
5	2	2	4	3
4	1	1	2	1.5

For candidates who have obtained secondary education after 2012, the corresponding levels of the State exam are determined as follows:

Exam	A (%)	B (%)	C (%)	D (%)	E (%)	F (%)
Latvian	80 - 100	65 - 79	50 - 64	36 - 49	21 - 35	5 - 20
Foreign language	84 - 100	68 - 83	52 - 67	36 - 51	19 - 35	5 - 18
Mathematics	85 - 100	62 - 84	40 - 61	23 - 39	12 - 22	5 - 11
Physics	83 - 100	65 - 82	46 - 64	30 - 45	19 - 29	5 - 18

Levels of state exams are converted into points according to table 1

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.

Student achievement assessment is carried out in accordance with the Cabinet of Ministers Regulations No. 305 of June 21, 2023, "Regulations on the State Standard of the State Professional Higher Education" and RTC's internal regulatory document "Regulations on the Basic Principles and Procedures for the Assessment of Higher Professional Education". (12.10.2023. 1.1.-2/15-RTK). See Annexees 34.1. – LV and 34.2. – EN,

Basic principles of evaluation are as follow:

1. accumulation of positive achievements;
2. compulsory assessment of the acquisition of the compulsory content included in the main parts of the study program;
3. openness and clarity of requirements regarding the set of basic requirements for the evaluation of the acquired education, in accordance with the aims and tasks of the study programs and study courses;:
4. the variety of test methods used in the assessment;
5. compliance of the assessment with the students' analytical and creative abilities, knowledge, skills and abilities;
6. the basic forms of study program acquisition evaluation are an exam and a test;
7. in the exam the acquisition of the study course is assessed in a 10-point system.
8. The completion of a study course is evaluated both on a 10-point scale and a pass/fail scale.

The results of study work are monitored and evaluated:

- during the semester;
- at the end of the semester - exams, tests;
- after completing the full study program - state examination.

During the semester, students' theoretical knowledge is tested and evaluated based on individual study work results: tests, essays, development of computer programs and databases, participation in discussions. The acquisition of practical skills is monitored by organizing practical tasks and internships. The forms of examinations during the semester are chosen to motivate students to work regularly and systematically.

Exams or passes are organized both in writing and orally. The final evaluation of the study course is obtained using the principle of adding up positive achievements. In the final evaluation, the exam accounts for 70% and the interim evaluations for 30%. This distribution may differ in different study courses.

After internships, students submit an internship report, which includes a description of the work done during the internship and an analysis of the results. The defense of internships is accepted by a commission.

The state examination consists of a qualification exam, which includes a qualification work. The qualification work is an individual work with a practical orientation. It should reflect the ability to select and systematize material, offer various problem-solving options, choose the most suitable

solution, justify the choice, and format the qualification work.

This assessment system allows each student's individual abilities to be successfully demonstrated, motivates systematic work, and provides an opportunity to comprehensively assess a student's knowledge, skills, and abilities.

The implementation of the RTC study process takes into account the principles of student-centered education:

- students and graduates are regularly surveyed to identify problems in the implementation of study programs, make changes to study program and/or course content.
- As the majority of our students already work in the field, we support independence in studies by offering teacher consultations, distance learning, and study materials in the electronic environment MOODLE. RTC has developed an internal normative document "Regulations on Work in the Distance Learning Process" (12.10.2023. Nr. 1.1.-2/16 - RTC) (see Annex 52.1. - only in Latvian).
- If necessary, we support studies according to individual plans. An internal normative document "Regulations on the Organization of Studies According to Individual Plans" has been developed.(12.10.2023. Nr. 1.1.-2/13 - RTC) (see Annex 53.1. - only in Latvian).
- All teachers support students in the study process, but the study program director manages the program. If changes in the organization of the study process or career are necessary, students can receive support from the Study Department. RTC has developed an internal normative document "Code of Ethics". (see Annex 44.2.)
- Students have the right to appeal all decisions made by RTC officials, including teachers, to the director.

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.

RTC has joined the unified computerized plagiarism control system VDPKS@lanet.lv, which is maintained by the University of Latvia.

As the study programs offered by RTC are based on engineering and technology, which require project work in qualification exams, we have not yet discovered any cases of plagiarism.

In the collective, however, certain cases of violation of academic honesty have been identified. In order to promote understanding of academic honesty and prevent its violations, RTK has developed an internal normative document „Regulations on academic honesty” (07.12.2023., Nr.1.1. – 2/27-RTK). See annexes 42.1.-LV un 42.2.-EN.

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.

RTC has developed a quality policy (see Annex 33.2.) aimed at fulfilling its mission, achieving strategic objectives, ensuring sustainable operations, developing a quality management and assurance system, and achieving quality-related principles in studies, research, and cooperation with society.

The RTC quality management and assurance system consists of interrelated subsystems:

- Planning and organization management systems.
- Work execution management systems.

RTC's development and investment strategy and its appendices form the basis of work planning. In addition, RTC develops detailed action plans that identify, describe, and initially structure the activities to be carried out to achieve RTC's goals.

The quality management and assurance at RTC are based on:

- ***External normative documents*** (See the links: Education Law , Vocational Education Law , Higher Education Law).
- ***Internal normative documents, including procedures.*** Links to documents in English here: https://www.rtk.lv/?sadala=203, https://www.rtk.lv/?sadala=5082, https://www.rtk.lv/?sadala=132, https://www.rtk.lv/?sadala=175, https://www.rtk.lv/?sadala=706, https://www.rtk.lv/?sadala=470

Internal normative documents, including procedures, are updated once a year if necessary.

Quality is ensured by:

- A diverse selection of study programs that correspond to industry development trends and are centered on the wishes of students.
- Competent academic staff who regularly acquire new knowledge and skills by working on various international projects and continuing their education.
- An innovative study environment based on the latest technology and an effective study process organized around practice and research.

Quality management is based on:

- ***Discussions and surveys***

Regular discussions and surveys help to timely identify dissatisfaction with the implementation of study programs and improve the quality of the organization of the study process.

- ***Annual evaluation of development and investment strategies***

At the end of each year, the working groups summarize the indicators of the strategic action plan implementation and make proposals for further actions. The summarized results and proposals are approved by the RTC Council. If necessary, the Development and Investment Strategy is revised.

Picture 2. Appendix 33.2.2.

- ***Self-assessment reports (by teachers, programs)***

Every year, the study program director develops a self-assessment of the study program. Based on suggestions from students, teachers, and employers, the study program or individual courses are

updated. The necessary changes to the study program are approved by the RTC Council.

Picture 3. Appendix 33.2.3.

- ***Evaluation of the college's teaching staff***

At the end of each academic year, teachers submit their self-evaluations to the study program director. The study program director submits the summarized self-evaluations along with survey results to the commission for evaluating the quality of teachers' work. If necessary, if students and / or the program director are dissatisfied with the lecturer's work, the commission conducts discussions and sets requirements for the lecturer to improve the work. In the next semester, the lecturer's work is intensified.

The academic staff can participate in courses and workshops covering the latest learning and teaching methods; their participation in advanced training courses as part of workshops and exhibitions organised by employers is encouraged.

Picture 4. Appendix 33.2.4.

- ***Annual analysis of the study process***

The implementation of the study process is regularly monitored.

Quality is characterized by:

- Results of state exams.
- Percentage of graduates.
- Percentage of dropouts overall and in each program separately.
- Further education and employment of graduates in the chosen field.
- Admission results.
- Satisfaction of students, graduates, and employers.
- Participation in competitions, projects, etc.
- Teacher continuing education.
- Percentage of students and teachers involved in research.
- Methodological materials and/or publications developed by teachers.
- Collaboration agreements with employers and social partners.

Picture 5. Appendix 33.2.5.

Every semester and in general every academic year, students 'progress, contingent changes, admission results, qualification exam results, research work, graduates' progress, as well as participation in projects are analyzed. The annual results can be found in the "Yearbooks" attached to our website www.rtk.lv. In the annual evaluation of the study work, which is usually presented at the meeting of the Council at the beginning of the new academic year, the results are evaluated by comparing at least the last three years and the necessary improvements are approved.

Based on the results of interviews and surveys, the necessary changes are made to the timetables. Based on the changes in the composition of the lecturers, as well as on the proposals of the quality evaluation commission, in cooperation with the director of the study program and the Personnel Department, changes are made in the composition of the lecturers.

By monitoring the quality of the study process with the above-mentioned activities, we have ensured the effectiveness of our quality assurance system. Regular evaluations, discussions, surveys, and data analysis provide an opportunity to quickly identify problems and find solutions.

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 program management, which includes study program development, review and evaluation, is one of the main processes at RTC.

Every year, the director of the study program prepares an evaluation of the study results, taking into account the results of the employers' survey or negotiations and the results of the graduates' survey. Every year, the quality of study courses is evaluated in accordance with the requirements of the labor market, as well as an analysis of the study process is carried out and solutions for its improvement are sought. The necessary changes in the study program are approved by the Council of RTC. The evaluation of the quality of lecturers' work also takes place every year. See images in annex 33.1.3. – LV and 33.2.3. - EN.

RTK has developed internal normative documents: "Procedure in which study programs are developed and submitted for approval" and "Procedure in which study course programs are developed and updated".

See in Latvian and English - https://www.rtk.lv/?sadala=175 , as well as in annexes 29.1. – LV, 29.2. – EN, 41.1 – LV and 41.2. – EN .

The internal regulatory document "Procedure in which study programs are developed and submitted for approval" stipulates that the development of a new study program can be initiated by the head of the department, lecturers or employers. The decision on the development of the new study program is made by the RTC Council, which evaluates the developed study program and makes a decision on its approval and submission for licensing. After receiving the license, the RTC Council approves the director of the created program.

The internal regulatory document "Procedure in which study course programs are developed and updated" stipulates that all study courses of the study program are implemented in accordance with the study course descriptions. All study course descriptions must be developed at the start of the study program implementation. The rules define a uniform form for study course descriptions. The description of the study course is developed by the lecturer who leads this study course. The director of the study program is responsible for the development of study courses. Study course descriptions are updated in all cases when changes are made to the study program.

As an example, the development of documentation for licensing of the second qualification "Information systems security specialist" of the study program "Information technologies".

During the reporting period, lecturers participated in the project "ICT Security in VET" (CB36, ITSVET) as part of the INTERREG V-A cross-border cooperation program of the Central Baltic Sea region, which resulted in the development of the requirements for the qualification "Information system security specialist", as well as the module plan, which is planned to be integrated into the study program "Information technology" as a second qualification.

RTC turned to LIKTA with the initiative to update the standard of the computer system and computer network administrator profession by dividing the professional qualification requirements of the Information systems security specialist. After harmonizing standard and professional

qualification requirements, in cooperation with LIKTA, documentation was prepared in accordance with regulatory documents. We have received approval from the Vocational Education and Employment Tripartite Cooperation Sub-Council (PINTSA) for the licensing of the second qualification. Currently, a study program plan with two qualifications, all study course descriptions and mappings has been developed.

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

According to the RTC "Internal Regulations for Students" (01.10.2003., Rīk. Nr.124-01-05-RTC) (see in Latvian and English https://www.rtk.lv/?sadala=132 , as well as in annexes 43.1.-LV and 43.2.-EN.), students have the right to participate in discussions on improving and enhancing the study process, organizing practical training, technical innovation, discipline, scholarship awards, and solving household issues. It is the duty of the entire student body to protect the property of the college, to systematically acquire theoretical and practical skills in the chosen specialty, to complete the tasks provided for in the study plans and programs in the specified time, to be cultured, polite, disciplined and not to perform actions that could harm the prestige of the college. Students have the right to participate in the discussion of issues related to the improvement and improvement of the study process, the organization of practical training, technical creativity, discipline, the awarding of scholarships and solving household issues.

The study contract stipulates that students have the right to appeal decisions by all officials, including teachers, to the director.

When starting their studies at RTC, students are informed of the opportunities to express complaints and suggestions to the relevant program director, department head, or study department manager.

The consideration of complaints and suggestions at RTC is carried out in accordance with the internal normative document "Code of Ethics" (1.1.-2/29-RTK) (see in Latvian and English https://www.rtk.lv/?sadala=5082 , as well as in annexes 44.1.-LV and 44.2.-EN.).

The task of the Code is to encourage all members of the RTC collective to be fair, honest and reliable, responsible and to perform their direct duties with the best of conscience, following the basic principles of ethics in mutual communication and behavior.

In the event of a violation of the norms of the Code, one has the right to submit a complaint to the director of studies or, with appropriate justification, to the head of the relevant department or the head of the Studies Department. If it cannot be solved alone, the head of the Studies Department turns to the College Director with a request to refer the issue to the Ethics Commission for consideration.

In the event that a violation of the Code's norms is resolved alone, the head of the unit must inform the Director of the College about the case under consideration.

The Ethics Commission informs the Director of the College about the reviewed cases in accordance with the procedures established by the Ethics Commission.

If the student's or employee's behavior is in violation of the Code, the College Director may issue a disciplinary order.

Non-examination of the case by the Ethics Commission cannot be the basis for non-application of disciplinary punishment.

As the study process at RTC is constantly monitored through regular surveys or discussions, problems are identified and resolved in a timely manner. In recent years, the Department of Studies has not received written complaints from students.

It is important to note that students have the opportunity to contact the RTC management even outside the official admission time to make proposals for improving the study process. In this case, students usually first contact the director of the study program. If the director of the study program cannot solve a question, then the student or the director of the study program himself turns to the head of the department or the Department of Studies, according to the question to be solved. RTC has a student self-government, where representatives of student groups can discuss important issues and, if necessary, ask officials for help.

Students also have the opportunity to receive individual consultations from the director of study programs or the curator. RTK management meetings are held once a year with all study program groups, as well as informative meetings with each study group separately during the semester. In the IT study program, meetings are held not only in person, but also remotely, on the Zoom platform, so that as many students as possible can participate in the meeting. Many questions are also addressed in informal group chats on the messaging tool WhatsApp.

Students often approach the director of the IT study program with a question about accessing their account in the Moodle system. Such questions are quickly resolved by an employee of the IT support department. There were also conflicts among the students, and in some cases between the student and the lecturer. Such situations are resolved through negotiation. Usually the conflict is resolved. Another example is that in 2019/2020 in the academic year in the 1st year, a relatively significant number of students were accepted in the Riga group during the last five years (50 students). Students complained about the insufficient number of workstations in the computer classrooms. This issue was solved by dividing the group into two subgroups, where the theoretical lessons were held together in the large auditorium, while the practical lessons were held separately.

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.

RTC student performance results and changes in the student body are summarized and analyzed at the end of each semester.

Students who are studying in state-funded study places and have not fulfilled their academic obligations within the prescribed period without a justified reason will be transferred to self-

financed study places. Students who do not switch to self-financing study contracts will be expelled according to the internal regulatory document "Procedure for the competition for state-funded study places and transfer to self-financed study places" (02.10.2023. Nr.1.1.-2/8-RTK). See in Latvian and English https://www.rtk.lv/?sadala=132, as well in annexes 45.1., 45.1.1.- LV and 45.2., 45.2.1. -EN.

All full-time budget and fee-paying students who, according to the schedule of the study process, have settled all academic obligations and/or financial obligations by the end of the current semester, participate in the rotation. Assessments of academic debts obtained in the period after the end of the semester until the decision on transfer from state budget-financed study places to self-financed study places or vice versa are not taken into account.

The distribution and rotation of study places financed by the state budget is carried out by RTC in accordance with the agreement between the Ministry of Education and Science on the funding for studies allocated from the state budget and the determined number of study places in the implemented programs.

The results of students' achievements are stored in the database of the Department of Studies, contingent changes are also stored in the VIIS system. The study department uses the database to prepare Academic reports if students decide to stop their studies, as well as to inform any student and lecturer about the obtained evaluations during the study process. At the start of a new academic year, the results of student achievements and contingent changes are presented to RTK employees, including lecturers.

The database is used to prepare summaries of achievements for diploma supplements. When students graduate from the study program, the results are stored for five years in the database of the Department of Studies, as well as in printouts. After that, they are transferred to the RTK archive.

In the study program, as in the entire RTC as a whole, various surveys of students, graduates and employers are organized. The results of the survey are presented in a summarized form to the lecturers, the head of the department and the Department of Studies. Shortly before graduation, students are surveyed about their satisfaction with the progress of the study process, the content of the study program. The content of the study program is regularly discussed with the employers, as well as the students' preparation for practical work in the company. After the end of the internship, students must submit an appendix to the contract "Internship assignment"(see "Practice organization procedure" in Latvian and English https://www.rtk.lv/?sadala=175 or 6.1 - LV and 6.2 - EN appendices) , where the internship manager of the company provides a brief description of the student and his success, often giving an indication of how the study content could be improved. In general, the results of the survey show a positive trend in satisfaction with the study plan and program content, lecturers and study environment and infrastructure. Taking into account the student survey analysis: in 2016, the study course "Latvia and Europe" was removed from the block of general education study courses. Instead, the study course "Fundamentals of Research Work" was introduced into the study plan. In 2023, the study course "Sport" was withdrawn. For some study courses, the planned achievable results and their evaluation criteria, as well as descriptions of independent tasks, were clarified.

2.2.5. Specify the websites (e.g., the homepage) on which the information on the study field and the relevant study programmes is published (in all languages in which the study

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

Information about the study directions and study programs is published on Riga Technical College website www.rtk.lv. In the near future we are planning to launch a new RTC website.

Since the study process of RTC takes place only in the Latvian language, the main language of the website also is Latvian.

Information about the *Information Technologies* study program is available here: https://www.rtk.lv/?sadala=175

The website administrator is responsible for posting information on the RTC website. The head of each structural unit monitors the quality of information available on our website and ensures that its contents comply with the regulatory documents.

The person responsible for information entry and compliance with the State Education Information

System (VIIS) is the Director of Studies. The filing clerk of the Study department is responsible for actual posting of the relevant information on the website. An HR specialist is responsible for updating the information in the VIIS academic personnel register.

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.

As the study programs "Telecommunications" and "Electronics" are currently not being implemented, we provide information only on the study program "Information Technology".

RTK has **352** students studying on state budget funds, of whom 70 are studying in the "Information Technology" program. **Total expenses are on average 1,781,112 EUR, of which 5,060 EUR are attributable to one student.** For the study program "Information Technology"

Total expenses	Per 70 students in the program	Per student	Percent
	354200 EUR	**5060 Eur**	66

Work remuneration	232410 EUR	3320,14 Eur	16
Employer's mandatory social insurance contributions, social benefits, and compensation.	56426 EUR	806,09 Eur	11
Products and services	39128 EUR	558,97 Eur	0
For research	0 Eur	0 Eur	1
Fixed capital	3242 EUR	46,31 Eur	6
Social transfers	22994 EUR	328,49 Eur	66

The allocated funding could be higher, as it is insufficient in the "Fixed capital" section, as well as are not intended in the "Research" section. Since information technologies are developing very rapidly, it is necessary to renew computer equipment regularly in order to be able to educate students according to modern requirements. Unfortunately, funds are very limited.

In order to attract additional funds, we work in projects. The biggest benefit in recent years has been from project no. 8.1.4.0/17/1/001 "Infrastructure development of Riga Technical College". Another possibility to attract additional funds is the opening of paid groups, but this would only be possible with a very large number of applicants and a low dropout rate during the study years.

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.

As the study programs "Telecommunications" and "Electronics" are not currently being implemented, we provide information only on the material and technical equipment available to students and lecturers in the implementation of the study program "Information Technology".

Students have access to computer network, computer construction and operating system laboratories.

The electronics assembly workshop and electronics laboratory are equipped with equipment from the Swedish company "TEKLAB" and the German company "FESTO". Several computer classrooms and lecture halls with multimedia equipment are also available to students, where audio and video study materials are used. For scientific research purposes, freely available databases such as Google Scholar, Mendeley, Microsoft Academic Search, and others can be used.

Operating systems that are used within the study process:

- Windows 10
- Windows Server
- Debian Linux
- Ubuntu Linux
- Mikrotik RouterOS
- Proxmox PVE

Applied software and services:

Virtualization:

- Hyper-V virtualization/containerization solution
- Oracle VirtualBox virtualization solution
- Proxmox Virtualization Environment virtualization/containerization solution

Domain management system (centralized user account management and access control):

- Windows Active Directory and related components
- Windows Network Policy service (RADIUS server service)
- Mikrotik RouterOS User Manager

Network services:

- Windows networking (IP, NAT, DNS, firewall, etc.)
- Linux/RouterOS networking (IP, NAT, DNS, firewall, etc.)
- RouterOS CAPSMAN (centralized wireless network management)

Server hardware and network equipment used in the training process:

- HP Proliant DL380 G6 servers with various performance options (12-core processors, 16GB RAM)
- HP Proliant DL380 G7 servers with various performance options (12-core processors, 48GB RAM)
- HP Proliant DL380 G10 servers with various performance options (12-core processors, 32GB RAM)
- Mikrotik RouterBOARD wireless access points - RB951, RB2011, CAP-AC, and HAP-AC models
- Mikrotik RouterBOARD network routers - RB1100AHX2, RB1100AHX4, and CCR1009 models
- HP Procurve network switches with various performance options
- Cisco Small Business network switches with various performance options
- Mikrotik RouterBOARD network switches - CRS125, CRS266, and CRS328 models

Tools for practical and laboratory work:

Specialized work table with a computer all-in-one and accessories:

- 3 in 1/HP ProOne 600 G3 21.5 NT AiO/Win 10 Pro 64/Intel Core i3-7100 3.9GHz/8GB (1x8GB) DDR4-2400/ 500GB/ USB BusSlim Keyboard/Optical USB Mouse/9.5 DVDRW/

Tool set:

6mm short and long screwdriver socket set. Includes TORX, PHILIPS, PZ1 and HEX standard size sockets.

Tool set:

6mm socket screwdriver with magnetic handle.

Tool set:

Pliers and insulation removal set with CAT3 insulation resistance.

- Insulation removal tools
  - Cable cutters
- Tweezers

Power supply:

Programmable portable power supply for use with single-phase 230VAC power supply.

- At least 3 programmable outputs with current/voltage regulation,
- 2 outputs with at least 0-24v voltage regulation range,
- With built-in protection against overload and overheating.
- Linear power supply with at least 150W total output power.

Soldering station:

Portable programmable soldering station with temperature stabilization, for use with single-phase 230VAC power supply. Designed for fine soldering work (work with small surface mount components).

- Quick-change soldering tip construction
- At least 10W power
- With built-in solder holder and tip cleaner.
- Dual soldering system, with regular and tweezer soldering iron
-

Oscillograph:

Digital portable oscillograph. For tasks from a single-phase 230VAC power supply network.

Multimeter:

Portable digital multimeter. For tasks with built-in batteries or battery packs.

Portable oscilloscope with DMM functions:

Portable digital oscilloscope and multimeter (DMM). For tasks with built-in batteries or battery packs.

Mechanical screw presses:

Table-mounted screw presses.

120mm compression width, 65mm adjustment range.

Tool set:

Battery impact screwdriver. Comes with a charger and two 2 amp-hour batteries. Can be used as a drilling machine. Uses the common M12 battery series.

Tool set:

Battery-powered straight grinder with accessories. Helps with removing broken screws in hard-to-reach areas, as well as dismantling metal and plastic sealed housings.

Uses the common M12 battery series.

Webinar room for organizing lectures/practical lessons.

Portable computer:

15.6", LED AntiGlare, Intel i3-5005U, 2.0GHz, 4 GB, 500 GB, Intel HD 5500 Graphics, HD 1366x768, Linux, ENG/RUS , 2.20 kg, DVD+/-RW

Document camera:

Lumens PS751

Portable WXGA projector

Motorized screen with remote control Kauber:

ECONO ELECTRIC 200

Microphones:

Desk microphone - RAZER SEIREN PRO ELITE XLR/USB DIGITAL MICROPHONE

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

The library is a structural unit of RTC and operates in accordance with internal normative acts. Its main task is to provide the learning and study process with the necessary information resources and services in accordance with the requirements of the study programs in all specialties.

The library's collection includes 18,046 units, including 18,041 books, of which 16,447 units are textbooks, of which 1,000 units relate to Information Technology. Audiovisual documents - 5 units. Periodicals in paper format - 16 titles.

Electronic resources include the e-newspaper "Izglītība un Kultūra," the e-journal "Skolas Psiholoģija," and normative acts in education. Access to the databases letonika.lv (only in Latvian), soma.lv (only in Latvian) and EBSCO.com is available to RTC students.

EBSCO is a leading provider of research database, e-journal and e-package subscription management, book inventory development and collection management, and a leading provider of library technology e-books to universities, colleges, government.

The library (117.4 m2), after the reconstruction and renovation of the library premises in 2013, has 31 workstations, 6 computers, a multi-functional device (combined printer, copier). A book protection system has been introduced in the library - security gates.

Photocopying and page printing with a printer are available at the library - a paid service in accordance with the Cabinet of Ministers Regulations No. 171 "Price list of paid services of colleges under the Ministry of Education and Science" as of March 18, 2021. Library readers have access to

free permanent and wireless Internet connection. In the reading room, students and teachers have free access to reference publications, the latest publications in all fields, and literature. 15 periodical publications are available in paper format. The library's collection includes books and teaching aids in foreign languages - English, German, and Russian.

In 2016, the RTC library was included in the unified state library information system, which provides for library processes to be carried out in the automated information system SKOLU ALISE. The computerized processing and cataloging of the collection's books have been started in the library. Readers, both in the library and remotely using the Internet, can search for the necessary publications.

The library's book collection is regularly supplemented with the latest and most relevant publications, taking into account the suggestions of teachers.

The electronic catalog is available at the following address: http://skolas.biblioteka.lv/Alise/lv/69/home.aspx, https://skolas.biblioteka.lv/Alise/lv/home.aspx

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.

As the majority of our students already work in the field, we support independence in studies by offering teacher consultations, distance learning, and study materials in the electronic environment MOODLE. RTC has developed an internal normative document "Regulations on Work in the Distance Learning Process".See in Latvian and English - https://www.rtk.lv/?sadala=175, as well as well annexes 52.1. – LV, 52.2. – EN.

Study materials and requirements for study courses are available on the MOODLE platform.

Students can connect to remote lectures and consultations, as well as use video recordings for studies.

In 2020, the Big Blue Button (BBB) video conference system was integrated into the Moodle platform for providing remote classes, consultations, and tests. A personal video virtual audience has been created for each lecturer, the creation and storage of video recordings is ensured. IT study program lecturers actively use this system.

IT study program lecturers actively use this system. Lecturers also use other tools in their study courses: for example, the online video conference organization application Zoom, Google Team, the collaboration application Microsoft Teams. Recordings of lessons in individual study courses are posted by lecturers on the video-sharing online social network website YouTube.com. Students reach them with the help of sent links.

Access to the Moodle system:

username: Peteris Kalniņš

password: RTK_Akred-konts#1

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.

Lecturers are elected to their positions through an open competition in the RTC Council by announcing job vacancies in the newspaper "Latvijas Vēstnesis". This procedure is provided for in point 34 of the Cabinet of Ministers Regulation No. 147 of February 27, 2007, "Regulations of the Riga Technical College Professional Education Competence Center". The procedure for the election of teachers is regulated by the RTC "Regulations on Elections to Academic Positions" (08.12.2004., Nr. 01-05-209) (see Annex 47.2).

See in Latvian and English https://www.rtk.lv/?sadala=5082 , as well as in annexes 46.1.-LV and 46.2.-EN

At the moment, the new RTC regulation is being coordinated with the institutions in the public portal of draft legal acts (RTC regulation in tapportals.mk.gov.lv) in order to soon send it to the Cabinet of Ministers for approval.

Lecturers are elected for six years.

Visiting lecturers are employed in accordance with Section 40 of the Higher Education Law, which stipulates that if there is a vacant academic position, the RTC Council may decide not to announce a competition, but to employ a visiting lecturer, visiting professor, or visiting assistant for a period of up to two years.

Vacancies are also openly presented on the RTC website www.rtk.lv in the section https://www.rtk.lv/?sadala=437

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.

RTC has developed an internal regulatory document "Procedure for Annual Evaluation of Teachers' Work Quality"(07.12.2023. Nr.1.1.-2/28) (see Annexees 35.2., 35.2.1., 35.2.2., 35.2.3.), which stipulates that at the end of each academic year, teachers must submit a self-evaluation of their work and information on the success of their groups to the Director of the Study Program. The evaluation of the teacher's annual work quality is carried out by the Director of the Study Program through the following activities:

- Self-assessment.
- Student survey.
- Observation and evaluation of classes.

The teacher's self-evaluation of work quality includes the following questions:

- Organization of the study process in classes.
- Assessment of student achievements.
- Consultations and support for students.
- Participation in college events and loyalty.
- Professional development of lecturers, including information on experience exchange and internships, further education courses, developed methodological works, and scientific research publications.

The Study Department compiles and submits for consideration by the Annual Teacher Performance Evaluation Commission the qualitative indicators of the work of lecturers submitted by the Study Program Director.

The professional development of lecturers is monitored by the HR Department in accordance with Cabinet Regulation No. 569 "Regulations on the Education Required for Teachers and the Procedure for Improving Teachers' Professional Competence" of September 11, 2018.

Lecturers regularly participate in various conferences and seminars organized by the Latvian Information and Communication Technology Association (LIKTA) and ICT industry companies. Lecturers actively participate in various projects. During the reporting period, lecturers participated in the "ICT Security in VET" (CB36, ITSVET) project within the Central Baltic Sea Region INTERREG V-A cross-border cooperation program, as a result of which the requirements for the qualification "Information Systems Security Specialist" and a module plan, which is integrated into the study program "Information Technology", were developed.

As information technology is developing very quickly, the participation of lecturers in various conferences, seminars, and projects is necessary to keep up with the development and be able to provide students with the latest information.

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

23 lecturers are involved in the implementation of the study program, 5 of whom have a doctoral degree in the relevant field, 12 have a master's degree, 3 have a bachelor's degree, and 3 have professional higher education.

We have invited one lecturer from the University of Latvia, two lecturers from Riga Technical University, one from Daugavpils University, and one from EKA University of Applied Sciences.

No.	Name and surname	Degree and/or professional qualification	Occupation	Implemented study courses / modules
1.	Vija Grava	Mg.math.	lecturer	Higher mathematics

No.	Name and surname	Degree and/or professional qualification	Occupation	Implemented study courses / modules	
2.	Inta Klotiņa	Dr.phys., Mg.paed.	associate professor	Physics	
3.	Jana Kuzmina	Dr.philol.	attending lecturer	English	
4.	Intars Pučurs	Mg.oec.	lecturer	Business economics	
5.	Sandra Sturīte	Mg.chem.	assistant	Environmental and civil protection	
6.	Ingrīda Golubeva	Mg.sc.ing., Mg.paed.	lecturer	Business psychology	
7.	Nikolajs Breners	Dr.sc.ing.	attending lecturer	Basics of research work	
8.	Arta Petaja	Mg.comp.	lecturer	Application software	
9.	Igors Būmanis	Bc.sc.comp.	assistant	Programming languages	
10.	Ivars Zagorskis	Mg.sc.ing.	lecturer	- Operating systems - Computer system design and computer architecture.	
11.	Oskars Rasnačs	Mg.math.	attending lecturer	Data base technologies	
12.	Evija Kopeika	Dr.oec.	attending lecturer	Labour protection	
13.	Vitālijs Aksjonovs	Prof. high	assistant	- Computer networks - Local computer networks and their administration - Network operating systems	

No.	Name and surname	Degree and/or professional qualification	Occupation	Implemented study courses / modules	
14.	Igars Marihins	Prof. high	assistant	Peripheral equipment	
15.	Natallia Karatun	Mg.sc.comp., Mg.sc.ing.	associate professor	- Software engineering - Network technologies	
16.	Rafails Rauhmans	Bc.sc.ing.	assistant	Electrical engineering and electronics	
17.	Maksims Ivancovs	Prof. high	assistant	Electrical engineering and electronics	
18.	Vita Balikova	Mg.math., Mg.oec., Mg.soc.	associate professor	- - Internship - Qualification internship	
19.	Andris Jaunkalns	Bc.sc.comp.	assistant	- Office automation - Big data management	
20.	Nellija Bogdanova	Dr.sc.comp.	attending lecturer	E - business	
21.	Iveta Ulmane	Mg.paed., Mg.oec.	associate professor	Foundations and Standards of Industry Law	
22.	Kristiāns Štekelis	Mg.sc.ing.	associate professor	Engineering graphics	
23.	Andrejs Bubovičs	Mg.sc.ing	lecturer	Computer usage in design	

Teachers are assigned study courses based on their education, knowledge, and skills in the relevant field. Election to academic positions is carried out in accordance with the internal regulatory document "Regulations on Academic Positions" (08.12.2004. Nr. 01-05-209) (see Annex 47.2.)

The workload for a teacher is 840 hours per year. Remuneration for work depends on the academic position and is approved by the RTC Council decision, based on the Cabinet of Ministers

Regulations No. 445 "Regulations on Remuneration for Pedagogical Work" of 05.07.2016.

From September 1, 2022, the wage rates for one workload are determined as follows:

Assistant - 810.00 EUR

Lecturer - 1012.00 EUR

Associate Professor - 1260.00 EUR

If a teacher's contact hours are reduced, their salary is also reduced. Conversely, if the workload increases, the salary also increases.

For example, if an associate professor is credited with only 240 hours in an academic year, they will receive only 360.00 EUR per month.

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.).

All teachers provide support to students in the study process, but the director of the study program manages it. If changes in the organization of the study process or career are necessary, students can receive support from the Study Department.

So far, we have been able to solve all student problems together. All teachers and administration are always open to necessary support and solutions.

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 main objective of RTC scientific research and innovation is to contribute to the competitiveness of RTC and its study programs by achieving the study outcomes set by the programs in research and innovation, promoting the implementation of research-based studies, developing research competences and results of academic staff and students, especially in the field of applied research and innovation, as well as developing cooperation with employers and other stakeholders.

Taking into account the needs and interests of stakeholders, the following priorities have been identified for the research and innovation strategy:

- Strengthening research and innovation capacity;

- Developing research and creativity among staff and students;
- Cooperation with external stakeholders in research and innovation.

A close link between the study process and scientific research activities is an essential prerequisite for the training of high-level specialists, the development of excellence, as well as for RTC international cooperation. Both staff and students participate in research.

The previous strategic planning period ensured that the content of qualification papers, coursework and research papers was developed in line with the needs of enterprises and based on the experience gained during internships.

At least half, and in some specialties 80-100%, of the qualification work themes are relevant to the requirements of the sector and its companies, and have been used to improve their performance.

Since 2003, RTK organizes annual international scientific-practical conferences "Higher professional education in theory and practice" and publishes collections of scientific articles. Their authors are teaching staff of Latvian and foreign universities, doctoral students, master's students and RTK graduates. The published articles can be useful for state institutions to make decisions on issues of short-cycle higher professional education implementation, as well as for entrepreneurs, scientific workers, university lecturers and students. In total, 18 volumes of scientific articles have been published. Collections of articles are available in the RTK library.

Departments determine their research priorities in cooperation with study program directors, lecturers and employer. The main research directions for the "Information Technologies" study program are:

- Use of information technology tools in the internal control system of companies.
- Application of information and communication technologies in solving business problems.
- Development perspectives of the information technology industry in Latvia.

Since 2017 RTC regularly holds scientific - practical conferences in which students, teaching staff and employers of the study programms "Information technologies" and "Electrical equipmentparticipate". The conferences are well-received by students as they provide information on the latest solutions and opportunities in industries.

The lecturers of the program are actively involved in scientific and practical research work. Prepared publications testify to this. For example, lecturers Jana Kuzmina, Natallia Karatun, Oskar Rasnačs. (see in annexes 25.1 - LV and 25.2. - EN)

The lecturer of the study program, Igors Būmanis, is studying at the Riga Technical University and is currently working on a master's thesis on the topic "Information security assessment and improvement in educational institution". The practical part of the master's thesis is based on the research of RTC information security.

In November of each academic year, an exhibition of coursework and qualification works is held for all RTK study programs, where all lecturers and students can familiarize themselves with the developed works.

RTK has developed the "Scientific Research and Innovation Development Strategy for 2021-2027" (07.06.2022 No. 1.1 - 2/8 - RTK). It can be viewed in Latvian and English at https://www.rtk.lv/?sadala=470 , as well as in attachments 51.1. – LV and 51.2. – EN.

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.

Every year, an exhibition of course papers, independent research papers, and qualification papers is held for all RTC study programs, where all teachers and students can get acquainted with the developed works.

Student scientific practical conferences have become a tradition, where students, teachers, and employers of the study programs "Information Technology" and "Electrical Equipment" participate.

Since 2003, RTC has been organizing international scientific-practical conferences "Higher Professional Education in Theory and Practice" and publishes collections of scientific articles. The authors of the articles are teachers of Latvian and foreign universities, doctoral students, master's students, and RTC graduates. The published articles can be useful for state institutions in making decisions on the implementation of short-cycle higher professional education, as well as for entrepreneurs,

scientists, university teachers, and students.
Collections of articles can be found in the RTC library.

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.

At a time when the content, structure, and specific forms of professional education are changing, cooperation with foreign partners in scientific research is essential for creating forms of professional education that promote the rapid acquisition of new technologies, increase the accessibility of professional education, and provide continuous education. One of the most effective forms of education is the implementation of educational programs using modules, both as part of a specific educational program and as a completely independent program.

During the reporting period, successful international cooperation in scientific research was the participation of teachers in the Central Baltic Sea Region INTERREG V-A cross-border cooperation program project "ICT Security in VET" (CB36, ITSVET), which resulted in the development of requirements for the qualification "Information Systems Security Specialist," as well as a module plan that is integrated into the study program "Information Technology," in collaboration with colleagues from Estonia and Finland.

In the further development of the "Information Technologies" study program, by opening admissions for the "Information Systems Security Specialist" qualification, we plan to cooperate with Estonian and Finnish colleagues in the joint implementation of the module, which will include the creation of joint study materials and the exchange of experience in the implementation of the study process.

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.

Unlike university-type education, college education does not have a wide range of academic knowledge and associated scientific research work by academic staff and students. However, elements of scientific work are gradually being introduced into the study process, starting from independent work on solving problems to comparing various options in study papers and qualification works.

According to the internal regulatory document "Regulations on Academic Positions," (08.12.2004., Nr.01-05-209-RTC) (see Annex 47.2.) the requirement for teachers to be elected to the position of associate professor or lecturer is to develop publications or teaching materials appropriate to the subfield of science every three years.

Teachers actively participate in courses and seminars on the latest teaching and pedagogical methods, and the attendance of qualification improvement courses in seminars and exhibitions organized by employers is encouraged.

Since 2003, RTC has been organizing international scientific-practical conferences "Higher Professional Education in Theory and Practice" and publishes collections of scientific articles. The authors of the articles are teachers of Latvian and foreign universities, doctoral students, master's students, and RTC graduates.

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 world today is characterized by globalization, the development of information technology, and diversity of values. Therefore, the activity of new specialists in various fields is becoming increasingly wide-ranging and unpredictable. Modern students need to learn to live in a world that is constantly changing and be prepared to create a completely different economic, political, social, and cultural environment in the future. RTC students are good at tasks that require memorizing or acting in familiar situations, but teachers require students to delve into and process diverse data, requiring solutions for non-standard situations, to establish connections between theoretically learned and real-life experience, to analyze what has been done and to set goals for future work. RTC students need to be able to work in a team and implement their ideas in new circumstances.

Every year, an exhibition of course papers, independent research papers, and qualification papers is held for all RTC study programs, where all teachers and students can get acquainted with the developed works.

Student scientific practical conferences have become a tradition, where students, teachers,

and employers of the study programs "Information Technology" and "Electrical Equipment" participate.

Since 2003, RTC has been organizing international scientific-practical conferences "Higher Professional Education in Theory and Practice" and publishes collections of scientific articles. The authors of the articles are teachers of Latvian and foreign universities, doctoral students, master's students, and RTC graduates.

Collections of articles can be found in the RTC library.

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 organization of RTC study process is based on competency building, changes created by the digital age in the lifestyle, identity, and behavior of the new generation, as well as the different perceptions of students regarding the value of education and its acquisition paths. To ensure that the study process is purposeful and satisfying for both students and teachers, it is important to understand and take into account the typical characteristics of the new generation.

Due to the Covid-19 pandemic, in 2020, the Big Blue Button (BBB) video conference system was integrated into the Moodle platform for providing remote classes, consultations, tests. A personal virtual video audience was created for each lecturer, which enables the creation and storage of video recordings. IT study program lecturers actively used this system.

Lecturers also used other tools in their study courses: for example, the online video conference organization application Zoom, Google Team, the collaboration application Microsoft Teams. Recordings of lessons in individual study courses were posted by lecturers on the video-sharing online social network website YouTube.com. The students reached them with the help of the sent links.

Innovations that were introduced and used in the study process during the pandemic are still being used and developed.

Currently, in accordance with the requirements of the era, the organization of the study process is regularly improved. We offer to learn part of the study courses remotely, as well as to use the study materials in digital form.

RTC has developed an internal regulatory document "Procedure for work in the remote study process" (12.10.2023, No. 1.1. 2/16, RTC). In Latvian and English, see https://www.rtk.lv/?sadala=175 , as well as in annexes 52.1. – LV and 52.2. – EN.

The purpose of the procedure is to determine uniform requirements for RTK teaching staff and students in the remote study process.

Distance studies at the college can be implemented up to 50 percent of the number of contact hours determined for the implementation of the relevant study program, which is specified in the approved study plan.

Remote studies are implemented as an effective, high-quality, full-fledged and inclusive part of face-to-face studies, in order to ensure the opportunity for students to learn the planned achievable

results in the study process and to develop cross-cutting skills, as well as to ensure a differentiated, personalized and interdisciplinary study process.

In individual study courses, it is offered to learn some of the topics independently, using the study materials prepared by the teaching staff and Internet resources. Tests are also added to the "Moodle" platform and introduced into the study process.

Students are offered links to shared platforms for consultation and exchange of information, as well as e-mail, WhatsApp and social networks. ZOOM, MS TEAMS and BigBlueBottom linked to the Moodle platform are used for remote studies and consultations.

Students and lecturers appreciate the possibilities of distance studies and consultations very much, because they reduce resources in achieving the goals of the study program.

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.

RTC's main cooperation partners are both industry professionals and employers - companies, organizations, public administration institutions, higher education institutions and industry associations, societies, and secondary general and secondary vocational education institutions. Cooperation takes place in various ways - meetings at RTC and at other involved parties, thus establishing contacts.

As part of the study direction, there is cooperation with the Daugavpils Technology and Tourism Technical College on the implementation of the "Information Technology" study program in Daugavpils. A cooperation agreement has been concluded with SIA "Alberta koledža" on multilateral cooperation, as well as on provision of study opportunities for students in the event that one of the educational institutions stops implementing its study programs or the program is not accredited. (in Latvian and English, see https://www.rtk.lv/?sadala=175 , as well as in annexes 38.1. - LV and 38.2. - EN)

The study program "Information technologies" is jointly implemented with the Social Integration State Agency of the Ministry of Welfare (SIVA). 2023/2024 in the academic year, one participant of the SIVA Vocational Rehabilitation Program has started studies in the IT program.

Within the scope of studies, we cooperate with Riga Technical University, Liepāja University and Daugavpils University. Universities undertake to provide students with opportunities to continue

their studies by transferring the appropriate credit points. Cooperation takes place in the joint use of material and technical bases, organization of lecturers' guest lectures, development of study materials, provision of internships.

Successful cooperation in updating the study program has been established with the Latvian Information and Communication Technology Association (LIKTA). We successfully cooperate with the Latvian Electrical Engineering and Electronics Industry Association (LETERA), as well as with the Confederation of Latvian Employers (LDDK).

Cooperation with employers takes place in areas such as improving the content of study programs, providing internships, conducting guest lectures, study tours, conducting and reviewing qualification papers and other activities within the study process. IT companies, as well as large organizations and companies with IT departments, are attracted to cooperation.

Representatives from the University of Latvia, Tet SIA (formerly - Lattelecom SIA), Children's Clinical University Hospital IT department, Narvesen SIA, Wonderlans Media SIA, If p&c insurance Latvian branches, Rīgas Veselības centrs SIA participate in the work of the State Qualification Commission of study programs and in reviewing the qualification works. The Information Center of the Ministry of the Interior of the Republic of Latvia, the Department of the Provision of Vocational Education Content of the State Educational Content Center, the Vocational and Adult Education Department of the Ministry of Education and Science, Daugavpils University, Business, Art and Technology University "RISEBA".

The list of practitioners since 2013 has exceeded 100 different companies and organizations.

In order to achieve study results, external activities are encouraged, where industry events, various seminars, conferences, discussions are attended. For example, the annual international conference "Cybershahs" dedicated to cyber security issues, LIKTA's annual long-distance communication conference, national seminars on societal challenges in the digital age. RTC organizes co-conferences, discussions, career days, open door days, stepgroups and competitions of inter-educational institutions, where new knowledge in the information technology sector is acquired and cooperation with professionals in their field is developed.

Since 2022, RTC has established a close cooperation with representatives of the Education and career portal PRAKSE.LV, participating in the event "Business Open Door Week". This event takes place twice a year in autumn and spring. A large number of IT industry companies participate in the event, inviting future specialists to visit the companies in person or online to learn about work and career opportunities. For lecturers, on the other hand, it is an opportunity to see the real work environment, learn about the latest technologies, establish contacts for further cooperation, for example, in the implementation of internships, organizing guest lectures, conducting qualification work.

In 2023, IT program students and lecturers participated in open door events at SIA Atea Global Services, SIA Scandiweb, SIA Tet.

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.

RTC's internationalization strategy is aimed at the general development, modernization of the educational institution, raising the training standards in accordance with the most current achievements in the field of European professional education, international cooperation, academic and student mobility. Active and successful participation in international programs and projects is considered an important part of RTK's development concep.

RTC's international activities are implemented within the framework of the EU Lifelong Learning Programme's Erasmus+ mobility and strategic partnerships, ESF program projects, and bilateral cooperation agreements. RTC participates in international exhibitions and conferences, seminars.

The RTC International Relations department in cooperation with the heads of other departments and study programs establishes contacts with the potential Erasmus+ partners in the labor market, using the college's international experience in other projects, supporting mutual cooperation with different institutions and long-term contacts with the national industry associations, for example, the Association of Mechanical Engineering and Metalworking Industry, the Association of Latvian Refrigerating Engineers, Latvian Electrical Engineering and Electronics Industry association. The department also has a diverse cooperation with the Latvian and EU companies, e.g. participation in EuroSkills and WorldSkills competitions and other international competitions. If the mobility of the program participant is carried out in a foreign company, we sign an inter-institutional agreement or a letter of intent. The activity of partner institutions is closely related to the new technologies, and it allows the program participants acquire up-to-date professional competencies.

RTC received the "Wings 2019" quality award from the Erasmus+ program for the project "Higher Education Student and Staff Mobility."

RTC has received Erasmus+ program quality award Wings 2022 in the nomination Erasmus+ program priority Environment and climate change prevention in the higher education sector for the project Higher Education Student and Staff Mobility (https://epale.ec.europa.eu/lv/content/pasniegta-valsts-izglitibas-attistibas-agenturas-izcilibas-balva-sparni-2022).

Foreign university lecturers and visiting lecturers from companies who participate in the implementation of RTC study programs are high-level modern technology experts with extensive work experience and motivation to support professional education, disseminate knowledge about technical innovations, to improve and enhance the quality of future specialists' work, and promote the further development of technology in various technological, organizational psychology, and management fields. Each guest lecturer's study material is integrated into the study program. All activities are conducted in foreign languages.

By the decision of the European Commission, RTC was awarded the Erasmus+ Charter for Higher Education 2021-2027 (ECHE - Erasmus Charter for Higher Education), which allows the higher education institution to participate in European Union Erasmus+ program activities.

The departments of International relations Studies regularly receive offers to cooperate from foreign institutions. The offers are looked through and the cooperation is further developed, based on the opportunities to learn the latest technologies and innovations in the study process.

The partner institutions of the Erasmus+ mobility project highly appreciate the RTC participation in the activities during all three main stages of the project - before mobility, during mobility and after it.

Positive and favorable feedback is the best recommendation for the local and international employers.

International companies, e.g. DAYTON, UAB Baltic Refrigeration Group,Refrigeration Partner MB, HAAS, OSS NETWORKS, PROLUX and others, offer to cooperate with RTC in employment of the new specialists. RTC faculty members are invited to participate in the national and international professional competence competitions as experts in theier respective fields of technologies.

To promote and expand the implementation of the RTC Erasmus+ program, contacts have been established and inter-institutional cooperation agreements have been signed with educational institutions in Lithuania, Estonia, Finland, Sweden, and Denmark during the reporting period.

No.	Institution with which the agreement has been concluded	Subject of the agreement	Duration of the agreement
1.	Kauno technikos kolegija, Lithuania	Mobility program of students and lecturers	indefinite
2.	Tallinna Tööstushariduskeskus, Estonia	Cooperation in the framework of Erasmus+	2021
3	Vana-Vigala Tehnika- ja Teeninduskool, Estonia	Cooperation in the framework of Erasmus+	2021
4	Paragon Europe, Malta	Mobility program of students and lecturers	indefinite
5.	European Tire Academy, Germany	International internship	indefinite
6.	Tampereen seudun ammattiopisto Tredu, Finland	Preparation of new specialists	indefinite
7.	The University of Bradford, Great Britain	Preparation of new specialists	indefinite
8.	Sandvikens Gymnasieskola, Sweden	Practical cooperation in IT	indefinite
9.	Junior Talents, Germany	International internship	indefinite
10.	Ukmerge School of Technology and Business, Lithuania	Preparation of new specialists	indefinite
11.	Lapland Education Centre REDU, Finland	Preparation of new specialists	indefinite

2.5.3. Specify the system or mechanisms, which are used to attract the students and the teaching staff from abroad. Provide the assessment of the incoming and outgoing mobility

of the teaching staff in the reporting period, the mobility dynamics, and the issues which the higher education institution/ college faces with regard to the mobility of the teaching staff.

The faculty recruitment at RTC is mostly done through the lifelong learning program Erasmus+, within the framework of bilateral cooperation agreements, as well as within the framework of ESF program projects.

The number of participants in international programs - including foreign internships for students and graduates, staff training mobility, incoming and outgoing teacher mobility - has increased by 15% over the past 3 academic years.

The implementation of mobility programs is based on the motivation of participants and the implementation of the college's development and modernization plan.

RTC departments and the International Relations department invite lecturers from EU companies for teaching activities. RTC sends an invitation to the employee of the particular foreign company. The guest lecturer's teaching activities are integrated into the study program. Guest lecturers are top-level experts in modern technologies with significant work experience and motivation to provide support to education, to disseminate knowledge about technological innovations in order to improve the quality of work of future specialists and promote the future use of the latest technologies. All activities were held in a foreign language.

Erasmus+ guest lecturers in their lectures and workshops demonstrated technical equipment that they had brought with them from their companies to present it to both the students and also RTC faculty. They are always innovative technologies, with which neither college students nor faculty have had the opportunity to work before.

Listed below are the incoming teacher mobilities that took place during the reporting period:

- Ratka Jurkovič - guest lecturer from *Svan Consulting* (Croatia) delivered lectures and conducted workshops in *Organizational psychology, Management* and *Economics*. The study material was specially prepared for the Latvian audience, which guaranteed the student interest and readiness to actively participate in classes.
- Lauma Kazuša, guest lecturer from the French company *SUEZ Trading Europe*, delivered lectures in *Civil and environmental protection* as part of the study course. The industry expert offered material on global climate change, its causes and consequences, natural resource management, circular economy, waste and energy management. The lecture materials, presentations in e-format, examples, comments and explanations were highly evaluated both by students and teachers.
- Guest speaker Mahmoud Rastampour, the director of *Baltic&Scan-Tech* Ltd (Stockholm, Sweden) gave lectures and conducted workshops for IT program students on the topics: *OSI reference model*, *Productivity improvement*, *Network and data security*, *Enterprise computer network solution with WiFi*, *Network management solutions*, *Cloud computing technologies,* N*etwork infrastructure solutions - Wired & Wireless*.
- Jaanus Eiskop, guest lecturer from *Baltic States of Eiskopf OU*(Estonia) gave lectures and conducted workshops for students of the field of study and faculty on the topic *Electronics equipment and circuit assembling and prototyping technology. LPKF ProtoMat S63 - A New Generation of Advanced Circuit Board Plotters*. It included theory and practical demonstrations (The all-rounder in the new LPKF ProtoMat S series is great for virtually any job in in-house prototyping. This also makes it suitable for drilling test adapters and housing

production).

- Guest speaker from *EDUTEL Sp.z o.o.*(Warsaw, Poland) M. Mazurkiewicz gave lectures and practical lessons for the students of IT and Telecommunications programs as well as teaching staff on the topics I*nteractive information input and output devices for education*, *E-learning technologies and latest trends*.

All the above-mentioned guest lecturers are long-term cooperation partners of RTC. RTC management and lecturers believe that this is a significant advantage of the Erasmus+ program – an opportunity to cooperate with experts-lecturers from foreign companies, because they are specialists with practical work experience in innovative technologies.

RTC lecturers Vita Balikova and Nikolajs Brenners delivered lectures at Kaunas Technical College for students of the field of study.

The small number of RTC teachers in outgoing mobilities may be explained with the following difficulties:

- workload of lecturers;
- emotional and psychological barriers to a foreign trip (lack of confidence, fear);
- Covid-19 restrictions;
- insufficient foreign language knowledge.

Considering the rapidly increasing volume of information available for students in the English language, RTC department of International relations offers the opportunity for faculty members to participate in various mobilities with an aim of improving their English language skills. RTC lecturers participate in ERASMUS+ academic, administrative and support staff mobilities in the member states.

Student internships in the European Union companies within ERASMUS program:

- A-IT-2 group student spent 8 weeks (May 18-July 17, 2015) at a company *Trellbeorg Sealing Solution*, Malta.
- Two students from A-IT-3 group had a traineeship at *Glasfaser und Fernmeldemontage*, Germany.
- A-IT-3 group student had an 8-week traineeship in Malta (Sept-Nov, 2015) at *Trelleborg Sealing Solutions*.
- 3 students from A-IT-2 group spent 8 weeks (May 29 – July 28, 2017) at *Paragon Europe*, Malta.
- A-IT-2 group student spent 8 weeks (May 7 – September 4, 2021) at *Horizon 2000 Computes Systems,* Malta.

All students received the Europass mobility document as a proof of obtained knowledge and skills, as well as certificates from the companies.

The RTC study process is conducted in the Latvian language. That is why we do not have any foreign students.

Statistical data for students, recent graduates, and teachers in the study direction of "Information Technology, Computer Science, Electronics, Telecommunications, Computer Management, and Computer Science" regarding international activities

Erasmus+ foreign internships for students and recent graduates in companies.		
Study program	**Country of internship**	**Number of students**

Information technology	Malta	10
	Germany	3
	Lithuania	3
Telecommunications	Malta	3
	Germany	6
	Sweden	1
Electronics	Spain	2

Erasmus+ teaching mobility programs		
Study program	**Company, country**	**Number of activities**
Information technology	Baltic&ScanTech AB, Sweden	2
	Edutel Sp.z.o.o., Poland	2
	Svan Consulting, Croatia	3
	Baltic States of Eiskopf OU, Igaunija, Estonia	4
Electronics	EiskopfO	6
	Kaunas Technical University	4
	Tallinn Polytechnic school	1

Central Baltic Programme 2014 - 2020		
Project type	**Project name**	**Project No.**
Partnership project	ICT Security in VET	CB36 ITSVET

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

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

study programmes.

The previous accreditation took place in 2013 during the same time period as the accreditations where carried out in other universities, the joint opinion of experts was prepared in 2012. It provides complex recommendations for all the study programs which should be improved for further development. The review contains the following recommendations:

1.use e-learning methods and tools more widely; 2.improve laboratory equipment, hardware and software tools;

3.attract more student applicants to the programs and stimulate demand;

4.strengthen ties with leading institutions of higher education and research in Latvia.

The implementation of all recommendations was started immediately after receiving them, the recommendations have been implemented and a continuous process for quality assurance continues.

1. In the study process, both lecturers and students increasingly use open access learning resources, e-journals and e-book databases, incl. EBSCO database, institutional and industry repositories, as well as scholarly information finders and other resources. Video recordings of lectures are used for the study of several study courses, which are placed in the Moodle and Big Blue Button video lecture system or on other Internet sites (for example, Youtube). Students can use these materials during the study course. Some of the lecturers also use other tools in their courses: for example, the online video conference organization application Zoom and Google Teams Microsoft Teams.

2. Students have access to various laboratories where they can learn practicall and specific computer science and electronics skills. These laboratories include:

- Computer Networks Lab: In this lab, students can perform a variety of computer network testing, configuration, and educational tasks. It is equipped with computers, routers, switches and other network devices. By cooperating with SIA Mikrotīkls, the acquisition of current skills in computer network administration is ensured. MicroTik routers and other equipment were received to supplement the material and technical base.

- Computer Construction Lab: In this lab, students can learn skills related to the selection, assembly and configuration of computer components. By using the equipment of the Finnish company "TEKLAB" and the German company "FESTO", students can practically learn the skills of assembling and assembling computers.

- Operating Systems Lab: In this lab, students can practice the skills of installing and configuring various operating systems. The laboratory is equipped with computers on which various operating systems such as Windows, Linux or macOS are installed, and virtualization systems are also used.

- In the electronics assembly workshop, students use equipment and devices to design and assemble electronics. - In the electronics laboratory, students practically learn the principles of electronics technology by conducting experiments and testing electronic components and circuits. The laboratory is equipped with modern measuring and testing devices that help students gain hands-on experience in the field of electronics.

Students also have access to computer labs where they perform practical tasks. A modern video conference computer classroom with multimedia equipment has been created, which ensures

effective learning and the use of study materials in lectures.

The labs and computer classrooms provide a conducive environment for students to learn hands-on computer network and computer system administration skills.

3. Starting from 2013/2014. During the academic years, the college has expanded its activities in the regions of Latvia (the Information Technology study program has been started in Daugavpils and Priekuļi branches of the College), attracting a larger number of applicants to the study program. As part of the study direction, there is cooperation with the Daugavpils Technical College on the implementation of the "Information Technology" study program in Daugavpils.

To attract students. Open days are organized and can be attended in person or online. Information ican be found on the RTK website (www.rtk.lv), , also on social networks (Facebook, Instagram), as well as in the media. We participate in regional informative events about the educational offer.

A cooperation agreement RTK has been concluded with SIA "Alberta college" on multilateral cooperation, as well as on provision of study opportunities for students in the event that one of the educational institutions stops the programs or the program is not accredited. (in Latvian and English, see https://www.rtk.lv/?sadala=175 , as well as in annexes 38.1. - LV and 38.2. - EN)

Within the scope of studies, we cooperate with Riga Technical University, Liepāja University and Daugavpils University. Universities undertake to provide students with opportunities to continue their studies by transferring the appropriate credit points. Cooperation takes place in the joint use of materials and technical bases, organization of lecturers' guest lectures, development of study materials, provision of internships.

Representatives from the University of Latvia, Daugavpils University, RISEBA School of Business, Arts and Technology participate in the work of the State Qualification Commission of the study program and in the review of qualification works.

See the list of cooperation agreements in the appendices 5.1. – LV and 5.2. – LV

The Expert Commission highligthed the following weak points:

1) The full information about the curriculum and lecture schedules was not provided, this information was revealed in interviews with management, students, etc.

At the moment, all information relating to the study program is available electronically online (rtk.lv and on the Moodle platform), the schedules for lectures and sessions are also available in paper format in the information stand.

2) the purpose and tasks of the study program are clearly described. The research was created simultaneously with the study program in cooperation with leading specialists.

The Expert Commission noted the following as weak points:

Quality:

- No e-learning was used;
- A detailed description of knowledge and practical training is missing ;
- There are no clear evaluation criteria according to which the student passes the relevant course;
- There should be greater clarity in solving unpleasant conflicts and problems ;
- The scientific studies of the teaching staff are not related to research.

Sustainability:

- no regular feedback;
- the execution plan of the development plan is not used in the plans of the next development period;
- academic staff should improve their CV in courses, seminars, etc.;
- SWOT must be conducted annually;
- the working conditions of teaching staff should be improved;
- promotion of academic staff to lifelong learning.

Resources :

- Internet resources and media are not used enough;
- Not enough books in English (library resources);
- Modern scientific equipment is not available.

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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).
(Not applicable)

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)	IZM_1.1.-18_144.edoc	IZM_1.1.-18_144.edoc
List of the governing regulatory enactments and regulations of the higher education institution/ college	Dokumentu un nolikumu saraksts_IKT_2023.docx	Dokumentu un nolikumu saraksts_IKT_2023.docx
The management structure of the higher education institution/ college	2.2. Govenment structure of the staff- - EN.xlsx	2.1. Koledžas vadības struktūra - LV.xlsx
II - Description of the Study Field - 2.1. Management of the Study Field		
Plan for the development of the study field (if applicable)	19.2. Development plan - EN.pdf	19.1. Studiju virziena attīstības plāns - LV.pdf
The management structure of the study field	RTK_structure.png	RTK_struktura.png
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.	38.2 RTU RTK agreement IT-EN.docx	38.1. RTU RTK vienošanās IT-LV.pdf
A document certifying that the higher education institution or college guarantees compensation for losses to students if the study programme is not accredited or the study programme license is revoked due to actions (actions or omissions) of the higher education institution or college and the student does not wish to continue studies in another study programme.	48.2.Tuition fee procedure-EN.docx	48.1 Studiju maksas samaksas kārtība-LV.docx
Standard sample of study agreement	39.2.A-IT state budget-EN.docx	39.1.A-IT budžeta līgums.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	22.2.pielikums.xlsx	22.1.pielikums.xlsx
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	3.pielikums.docx	3.pielikums.docx
Biographies of the teaching staff members (Curriculum Vitae in Europass format)	4.2. CV EN.zip	4.1. CV LV.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.	23.pielikums.edoc	23.pielikums.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.	24.2.pielikums.docx	24.1.pielikums.docx
List of the publications, patents, and artistic creations of the teaching staff over the reporting period.	25.2.pielikums.docx	25.1.pielikums.docx
II - Description of the Study Field - 2.5. Cooperation and Internationalisation		
List of cooperation agreements, including the agreements for providing internship	5.2.pielikums.docx	5.1.pielikums.docx
Statistical data on the teaching staff and the students from abroad	26.2. Statistical data on foreign students and teaching staff EN.pdf	26.1. Statistikas dati par ārvalstu studējošajiem un mācībspēkiem LV.pdf
Statistical data on the incoming and outgoing mobility of students (by specifying the study programmes)	27.2. Mobility of students - EN.pdf	27.1. Studējošo mobilitāte-LV.pdf
Statistical data on the incoming and outgoing mobility of the teaching staff	28.2. Mobility of lecturers - EN.pdf	28.1. Docētāju mobilitāte - LV.pdf
II - Description of the Study Field - 2.6. Implementation of the Recommendations Received During the Previous Assessment Procedures		
Report on the implementation of the recommendations received both in the previous accreditation and in the licensing and/ or change assessment procedures and/ or the procedures for the inclusion of the study programme on the accreditation form of the study field.	8.1.ANGĻU VAL. parb..docx	8.1.pielikums.docx
An application for the evaluation of the study field signed with a secure electronic signature	AIC_87_iesniegums (1).edoc	AIC_87_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		
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
Attēls 1..docx	Attēls 1..docx
Picture 1.docx	Picture 1.docx
Attēls 2..docx	Attēls 2..docx
Picture 2..docx	Picture 2..docx
Picture 3..docx	Picture 3..docx
Picture 3..docx	Picture 3..docx
Attēls 4..docx	Attēls 4..docx
Picture 4..docx	Picture 4..docx
Attēls 5..docx	Attēls 5..docx
Picture 5..docx	Picture 5..docx
pielikums 1.1. Koledžas struktūru ar programmu īstenošanas vietām	1.1.Koledžas struktūra ar īstenošanas vietām LV.xlsx
Annex 1.2. The structure of the college with the places of implementation of the programs	1.2.College structure with program impplementation places.xlsx
Pielikums 30.1 RTK „Attīstības un investīciju statēģija 2021. – 2027.gadam”	30.1. RTK stratēģija LV.docx
Annex 30.2 RTC „Development and investment strategy for 2021-2027"	30.2. RTK Strategy-EN.docx
Pielikums 32.1. Rīgas Tehniskās koledžas padomes darbības nolikums	32.1.pielikums-RTK padomes darbības nolikums.docx
Annex 32.2. RTK Regulations of Council Work-EN.docx	32.2. RTK Regulations of Council Work-EN.docx
Pielikums 7.1. Revīzijas komisijas nolikums - LV.docx	7.1. Revīzijas komisijas nolikums - LV.docx
Annex 7.2. Regulations of the audit committee-EN.docx	7.2. Regulations of the audit committee-EN.docx
33.1. Kvalitātes politika-LV.doc	33.1. Kvalitātes politika-LV.doc
33.1.1. Attēls 1..docx	33.1.1. Attēls 1..docx
33.1.2. Attēls 2..docx	33.1.2. Attēls 2..docx
33.1.3. Attēls 3..docx	33.1.3. Attēls 3..docx
33.1.4. Attēls 4..docx	33.1.4. Attēls 4..docx
33.1.5 .Attēls 5..docx	33.1.5 .Attēls 5..docx
33.1.6. Attēls 6.docx	33.1.6. Attēls 6.docx
33.2.7. Picture 7.docx	33.2.7. Picture 7.docx
33.1.8. Attēls 8.docx	33.1.8. Attēls 8.docx
33.2. Quality polity-EN.docx	33.2. Quality polity-EN.docx
33.2.1. Picture 1.docx	33.2.1. Picture 1.docx
33.2.2. Picture 2..docx	33.2.2. Picture 2..docx
33.2.3. Picture 3..docx	33.2.3. Picture 3..docx

33.2.4. Picture 4..docx	33.2.4. Picture 4..docx
33.2.5. Picture 5..docx	33.2.5. Picture 5..docx
33.2.6. Picture 6.docx	33.2.6. Picture 6.docx
33.2.7. Picture 7.docx	33.2.7. Picture 7.docx
33.2.8. Picture 8.docx	33.2.8. Picture 8.docx
29.1.Kārtība, kādā tiek izstrādātas studiju programmas.docx	29.1.Kārtība, kādā tiek izstrādātas studiju programmas.docx
29.1.1..Studiju procesu grafiki.doc	29.1.1..Studiju procesu grafiki.doc
29.1.2. Studiju plāni.xls	29.1.2. Studiju plāni.xls
29.1.3. Kontaktstundu sadalījums.xls	29.1.3. Kontaktstundu sadalījums.xls
29.2. Procedures for the development and submision.docx	29.2. Procedures for the development and submision.docx
29.2.1.Schedule of study process-EN.doc	29.2.1.Schedule of study process-EN.doc
29.2.2. Detailed study plans.-EN.xls	29.2.2. Detailed study plans.-EN.xls
29.2.3. Study plans.-EN.xls	29.2.3. Study plans.-EN.xls
41.1.Kārtība, kādā tiek izstrādātas un aktualizētas studiju kursu programmas-LV.docx	41.1.Kārtība, kādā tiek izstrādātas un aktualizētas studiju kursu programmas-LV.docx
41.1.1. Studiju kursa apraksts - LV.docx	41.1.1. Studiju kursa apraksts - LV.docx
41.2. Procedures for developing and updating study course programs-EN.docx	41.2. Procedures for developing and updating study course programs-EN.docx
41.2.1. Description of the study course-EN.docx	41.2.1. Description of the study course-EN.docx
34.1. Noteikumi par vērtēšanas kārtību - LV.docx	34.1. Noteikumi par vērtēšanas kārtību - LV.docx
34.2.Provisions on basic principles and procedures for the evaluation - EN.docx	34.2.Provisions on basic principles and procedures for the evaluation - EN.docx
35.1. Docētāju ikgadējās darb kvalitātes izvērtēšanas kārtība-LV.docx	35.1. Docētāju ikgadējās darb kvalitātes izvērtēšanas kārtība-LV.docx
35.1.1. Docētāja pašvērtējums-1.pielik.doc	35.1.1. Docētāja pašvērtējums-1.pielik.doc
35.1.2. Docētāja nodarbības vērošana-2.pielik.docx	35.1.2. Docētāja nodarbības vērošana-2.pielik.docx
35.1.3. Docētāja darba vērtējums - 3.pielikums.doc	35.1.3. Docētāja darba vērtējums - 3.pielikums.doc
35.2.1.Teacher's self-assessment- Appendix 1.-EN.docx	35.2.1.Teacher's self-assessment- Appendix 1.-EN.docx
35.2.2. Open lesson. Appendix 2.-EN.docx	35.2.2. Open lesson. Appendix 2.-EN.docx
35.2.3. Annual assessment. Appendix 3.-EN.docx	35.2.3. Annual assessment. Appendix 3.-EN.docx
49.1. Studiju virziena pārvaldības struktūra-LV-EN.xlsx	49.1. Studiju virziena pārvaldības struktūra-LV-EN.xlsx
49.2. Administrative structure of studies-EN.xlsx	49.2. Administrative structure of studies-EN.xlsx

40.1. A-IT-pašfinansējums.doc	40.1. A-IT-pašfinansējums.doc
40.2. A-IT-self-financing_EN.docx	40.2. A-IT-self-financing_EN.docx
37.1.Imatrikulācija-2024-2025.docx	37.1.Imatrikulācija-2024-2025.docx
37.2.Matriculation procedure-2024-2025_EN.docx	37.2.Matriculation procedure-2024-2025_EN.docx
36.1. Nolikums par studiju rezultātu atzīšanu.docx	36.1. Nolikums par studiju rezultātu atzīšanu.docx
36.1.1.IESNIEGUMS studiju rez.atzīšama-1.pielik.doc	36.1.1.IESNIEGUMS studiju rez.atzīšama-1.pielik.doc
36.1.2.Protokols rezultātu atzīšanai-2.pielik.docx	36.1.2.Protokols rezultātu atzīšanai-2.pielik.docx
36.1.3.APLIECĪBA-stud,rez.atzīšana-3.pielik.doc	36.1.3.APLIECĪBA-stud,rez.atzīšana-3.pielik.doc
36.2.Regulations on the results achieved in previous sducation.docx	36.2.Regulations on the results achieved in previous sducation.docx
36.2.1. Application. Appendix 1.-EN.docx	36.2.1. Application. Appendix 1.-EN.docx
36.2.2. Protocol Appendix 2.-EN.docx	36.2.2. Protocol Appendix 2.-EN.docx
36.1.3.APLIECĪBA-stud,rez.atzīšana-3.pielik.doc	36.1.3.APLIECĪBA-stud,rez.atzīšana-3.pielik.doc
34.1. Noteikumi par vērtēšanas kārtību - LV.docx	34.1. Noteikumi par vērtēšanas kārtību - LV.docx
34.2.Provisions on basic principles and procedures for the evaluation - EN.docx	34.2.Provisions on basic principles and procedures for the evaluation - EN.docx
44.1. Ētikas kodekss-LV.docx	44.1. Ētikas kodekss-LV.docx
44.2 Code of Ethics-EN.docx	44.2 Code of Ethics-EN.docx
52.1. Darbs attālinātā studiju procesā.docx	52.1. Darbs attālinātā studiju procesā.docx
53.1.Individuālie plāni.docx	53.1.Individuālie plāni.docx
42.1. Akadēmiskais godīgums-LV.docx	42.1. Akadēmiskais godīgums-LV.docx
42.2. Rules on Academic integrity-EN.docx	42.2. Rules on Academic integrity-EN.docx
33.1. Kvalitātes politika-LV.doc	33.1. Kvalitātes politika-LV.doc
33.2. Quality polity-EN.docx	33.2. Quality polity-EN.docx
33.1.3. Attēls 3..docx	33.1.3. Attēls 3..docx
33.2.3. Picture 3..docx	33.2.3. Picture 3..docx
29.1.Kārtība, kādā tiek izstrādātas studiju programmas.docx	29.1.Kārtība, kādā tiek izstrādātas studiju programmas.docx
29.2. Procedures for the development and submision.docx	29.2. Procedures for the development and submision.docx
43.1.Iekšējās kārtības noteikumi studentiem-LV.docx	43.1.Iekšējās kārtības noteikumi studentiem-LV.docx
43.2. Internal regulations for students-EN.docx	43.2. Internal regulations for students-EN.docx
45.1. Rotācijas kārtība-LV.docx	45.1. Rotācijas kārtība-LV.docx
45.1.1. Rotācijas veidlapa.xls	45.1.1. Rotācijas veidlapa.xls
52.1. Darbs attālinātā studiju procesā.docx	52.1. Darbs attālinātā studiju procesā.docx

47.1. Nolikums par akadēmiskiem amatiem-LV.docx	47.1. Nolikums par akadēmiskiem amatiem-LV.docx
47.2.Regulations on academic positions-EN.docx	47.2.Regulations on academic positions-EN.docx
35.1. Docētāju ikgadējās darb kvalitātes izvērtēšanas kārtība-LV.docx	35.1. Docētāju ikgadējās darb kvalitātes izvērtēšanas kārtība-LV.docx
35.1.1. Docētāja pašvērtējums-1.pielik.doc	35.1.1. Docētāja pašvērtējums-1.pielik.doc
35.1.2. Docētāja nodarbības vērošana-2.pielik.docx	35.1.2. Docētāja nodarbības vērošana-2.pielik.docx
35.1.3. Docētāja darba vērtējums - 3.pielikums.doc	35.1.3. Docētāja darba vērtējums - 3.pielikums.doc
35.2.Procedure for the annual assessment of teachers - EN.docx	35.2.Procedure for the annual assessment of teachers - EN.docx
35.2.1.Teacher's self-assessment- Appendix 1.-EN.docx	35.2.1.Teacher's self-assessment- Appendix 1.-EN.docx
35.2.2. Open lesson. Appendix 2.-EN.docx	35.2.2. Open lesson. Appendix 2.-EN.docx
35.2.3. Annual assessment. Appendix 3.-EN.docx	35.2.3. Annual assessment. Appendix 3.-EN.docx
51.1.Zinātniskās pētniecības un jaunrades attīstības stratēģija-LV.docx	51.1.Zinātniskās pētniecības un jaunrades attīstības stratēģija-LV.docx
51.2. Strategy for Development of Scientific Research and Innovation - EN.docx	51.2. Strategy for Development of Scientific Research and Innovation - EN.docx
47.1. Nolikums par akadēmiskiem amatiem-LV.docx	47.1. Nolikums par akadēmiskiem amatiem-LV.docx
47.2.Regulations on academic positions-EN.docx	47.2.Regulations on academic positions-EN.docx
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54.1. Studiju_kursu_atzisanas_kartiba.docx	54.1. Studiju_kursu_atzisanas_kartiba.docx
38.1. Alberta koledža - RTK vienošanās - LV.pdf	38.1. Alberta koledža - RTK vienošanās - LV.pdf
38.2. Alberta koledža - RTK agreement-EN.pdf	38.2. Alberta koledža - RTK agreement-EN.pdf
45.2. The procedure for competing for budget-funded study places and transfer to self-funded study places-EN.pdf	45.2. The procedure for competing for budget-funded study places and transfer to self-funded study places-EN.pdf
45.2.1. Rotation form EN.pdf	45.2.1. Rotation form EN.pdf
54.2. Recognition of previously completed study courses - EN.pdf	54.2. Recognition of previously completed study courses - EN.pdf
Valsts valodu zināšanu apliecinājums	AIC_6.edoc
National language approval certificate	AIC_6_angliski.edoc
A-IT diploma pielikuma paraugs-2024	A-IT diploma pielikuma paraugs-2024.docx
Information about Daugavpils implementation place	Informacija par studiju virziena istenosanu-papildinajums.docx
IT diploma _first level-1	IT diploma _first level-1.pdf
IT diploms_pirmā līmeņa	IT diploms_pirmā līmeņa prof.augstākā-1.pdf

Letter response for additional information	Precizejumu Vēstule.docx
2. Kvalitātes politika-2022- EN.pdf	2. Kvalitātes politika-2022- EN.pdf
2. Kvalitātes politika-2022--1.pdf	2. Kvalitātes politika-2022--1.pdf
2.Iekšējie normatīvie dokumenti-1.doc	2.Iekšējie normatīvie dokumenti-1.doc
3. Development plan - EN (Autosaved).docx	3. Development plan - EN (Autosaved).docx
5. Compilation of quantitative data (1).docx	5. Compilation of quantitative data (1).docx
6. List of publications.pdf	6. List of publications.pdf
6. 25.2. List of publications.docx	6. 25.2. List of publications.docx
7.1.pdf	7.1.pdf
7.Service agreement	7.1.pdf
15....33.2.5. studntu aptaujas.xlsx	15....33.2.5. studntu aptaujas.xlsx
16. .ABSOLVENTU APTAUJAS JAUTĀJUMI_2017.docx	16. .ABSOLVENTU APTAUJAS JAUTĀJUMI_2017.docx
19.2. Development plan - EN.pdf	19.2. Development plan - EN.pdf
Iekšējie normatīvie dokumenti ar linkiem.docx	Iekšējie normatīvie dokumenti ar linkiem.docx
RTK Ekspertu pieprasījumi pirms vizites 9.febr..docx	RTK Ekspertu pieprasījumi pirms vizites 9.febr..docx

Information Technologies (41483)

Study field	*Information Technology, Computer Hardware, Electronics, Telecommunications, Computer Management, and Computer Science*
ProcedureStudyProgram.Name	*Information Technologies*
Education classification code	*41483*
Type of the study programme	*First level professional higher education study programme*
Name of the study programme director	*Vita*
Surname of the study programme director	*Balikova*
E-mail of the study programme director	*vita.balikova@kcrtk.lv*
Title of the study programme director	*docente, Mg. math., Mg. oec., Mg. soc.*
Phone of the study programme director	*+37126575178*
Goal of the study programme	*Prepare qualified specialists - computer systems and network administrators who ensure the optimal performance of computer hardware, software, and networks for the needs of users.*
Tasks of the study programme	*To achieve the stated goal, the program aims to provide knowledge and develop the set of skills, abilities, and attitudes necessary for professional practice.* *A computer systems and network administrator can work in companies where they* *1) perform computer system and/or network design,* *2) installation,* *3) implementation, and/or maintenance,* *or can be self-employed.* *Upon completing the study program, graduates will have the set of knowledge, skills, abilities, and attitudes necessary for professional practice.*

Results of the study programme	*1. Maintenance of a computer equipment: knows how to install and configure computer equipment, performs the necessary maintenance of computer equipment, diagnoses problems with the use of computer equipment, eliminates problems with the use of computer equipment, performs small repairs of computer equipment, performs an inventory of existing computer equipment and computer network;* *2. Software maintenance: knows how to install and configure software, performs necessary software updates, diagnoses software usage problems, eliminates software usage problems, prevents unauthorized software usage, performs inventory of existing software.* *3. Administration of computer systems and computer networks: knows how to create user accounts, maintain user accounts, grant the user various access rights to the computer system, administer computer network services, administer the file system.* *4. Provision of information protection: knows how to implement the information system security policy in the organization in accordance with regulatory enactments and laws, ensures the physical security of the computer system, ensures the security of computer networks, provides anti-virus protection of the computer system, ensures the continuous power supply of the computer system, creates backup copies of information.* *5. Supporting computer systems users and computer networks: knows how to prepare necessary user documentation and work instructions, provides technical support to users, advises users with different levels of knowledge, timely informs users about significant changes in the work of a computer system or computer network.* *6. Preparation of IT documentation in accordance with record keeping norms: able to document the content of IT infrastructure, document IT infrastructure changes, document user access rights and their changes, document one's activity.* *7. Development planning of IT infrastructure: knows how to analyze the operation statistics of the existing computer system, uses the knowledge and skills acquired in practice, systematically improves his professional knowledge and skills, follows the news in the information technology sector, prepares proposals for the necessary improvements in software and/or computer equipment, presents his ideas and proposals.* *8. Design of computer systems and computer networks: has an idea of computer system and computer network design technologies, knows how to design computer networks and computer systems, chooses the most suitable option for solving tasks.* *9. General knowledge and competences: know how to organize and manage team work, communicate in the national language and foreign languages, observe the principles of business communication and professional ethics, apply mathematical skills, comply with occupational safety, occupational protection, civil protection, fire safety and electrical safety requirements, comply with environmental protection requirements, improve their professional qualifications, comply with regulatory acts and standards.*

Final examination upon the completion of the study programme	*The state examination consists of a qualification exam, which includes a qualification work. The qualification work is an individual work with a practical orientation.*

Study programme forms

Full time studies - 2 years, 6 months - latvian

Study type and form	*Full time studies*
Duration in full years	*2*
Duration in month	*6*
Language	*latvian*
Amount (CP)	*150*
Admission requirements (in English)	*Applicants who wish to study at RTC and have completed secondary education must submit documents certifying their secondary education (certificate of secondary general education or diploma of secondary professional education).*
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	---
Qualification to be obtained (in english)	*Computer Systems and Network Administrator*

Places of implementation

Place name	City	Address
Vocational education competence center "Riga Technical College"	RĪGA	BRASLAS IELA 16, VIDZEMES PRIEKŠPILSĒTA, RĪGA, LV-1084

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.

Based on the decrease in the number of students and the demand, it was decided to implement the program only full-time in person.

Starting from the 2013-2014 academic year, the College has expanded its program offerings in the regions of Latvia (the Information Technologies program was offered in the RTC Daugavpils and Priekuļi branches). Due to the small number of students in the IT program in Priekuļi branch as well as lack of demand for this program, only two groups successfully graduated the college in 2016 and 2020 respectively. Since 2020, the study program in the Priekuļi branch has not been offered. Those who show an interest in studying in the IT program are offered an opportunity to enroll in this program in Riga or Daugavpils branch. In the Daugavpils branch, the number of students in the IT program was significantly higher than in Priekuļi branch. It has to be mentioned that the demand for computer network and computer system specialists in this region was relatively stable until 2019 (on average around 22 applicants in the 1st year each year). As of September 2019, the number of students enrolled in the 1st year of the IT program has significantly decreased (on average around 8 applicants each year in the 1st year). This could be related to the significant deterioration of the demographic and economic situation in Daugavpils region. According to the amendments to the Vocational Education law, effective April 1, 2022, the branches of RTC were reorganized. Today Daugavpils is a place where one of the educational programs is being offered (see point 1.1 of this report).

After the approval of the new Professional Standard (June 8, 2022), the study program was updated according to the new professional standard. It was not necessary to introduce significant changes in the content of the study program, as it is being regularly updated to keep up with the current situation in the industry. Following the demand of the students and due to the decrease in the number of students, it was decided to offer this program only in a full-time mode. Classes for students are organized in the afternoon, so that working students can combine studies with work.

After the adjustments introduced during the Covid pandemic, part of the theoretical lessons of the study courses are organized remotely, which helps working students much easier adjust their working hours to the study process.

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

The development of the information and communications technologies (ICT) infrastructure and the effective use of the opportunities provided by them contribute to the socio-economic growth of the country.

Short-cycle higher professional education is an important tool in the growth of the Latvian economy, which is especially important for the improvement and development of engineering sciences, including ICT study programs. It is important to provide opportunities for obtaining higher professional education with a practical orientation within a short period of time, which is successfully carried out by RTC.

The short-cycle professional higher education study program *Information technologies* with the qualification *Computer Network and System administrator* has been developed based on the professional standard. It belongs to the fifth professional qualification level of the *Electronic and optical equipment production, information and communication technology area* - computer systems and computer network administrator (PS were approved at PINTSA meeting, June 8, 2022).

After successful completion of the study program, the students receive the professional qualification *Computer Network and System administrator*, which in accordance with the regulations of the Cabinet of Ministers of June 13, 2017 no. 322 "Regulations on Latvian education classification" corresponds to the education group 483 - *Computer systems, databases and computer networks*, with the assigned classification code - 41 483.

The name of the study program *Information technologies* is connected with the awarded qualification, because the professional qualification awarded by the study program is included in the fifth professional qualification level that unequivocally indicates the compliance of the study program with the field of study *Information technologies, computer engineering, electronics, telecommunications, computer management and computer science*.

The total amount of the study program credit points is 150 CP/ECTS, the length of the program is two years and six months in full-time studies (30 CP/ECTS in each semester). The study language is Latvian (see Appendix Study plan 13.1 – LV and 13.2. – ENG).

Studies are organized on weekdays in the afternoon (from 15:20 till 21:25), some lectures are offered online. If necessary, the study process is organized according to an individual plan. Based on the fact that studies take place in the afternoon on weekdays, RTC has its own target audience of students, and therefore, there is no doubt that the study program is useful.

The study program is a short-cycle professional higher education program, its admission requirements do not include the applicant's special prior knowledge, only what has been learned at the secondary education level.

Applicants who wish to study in the IT study program must submit their secondary education diploma.

Applicants who during the last three years have participated in the international and national olympiads approved by the Ministry of Science in mathematics, physics, IT, Latvian language, foreign language and have won the first three places, are given preference and admitted to the state financed full-time study places.

Applicants who have obtained secondary professional education in a related specialty and passed the state professional qualification exam with the grade 7 and above receive 2 additional points.

Applicants granted low-income status (by submitting the appropriate documents) are given

preference if there are several applicants with the same number of points.

Admissions to full-time studies at RTC are based on the competition among applicants for available spaces:

1. Based on the total number of points obtained in two state exams – Latvian and Mathematics or Physics, or English - according to the table (see paragraph 2.1.4 of this report).
2. Based on the average grade (grades=points) in the grade report, after adding all grades up.

Applicants who have obtained secondary education before 2004 or abroad, or are persons with special needs and have received doctor's signed exemptions from the state exams, participate in the competition together with other applicants. The total sum of points in these cases is formed by adding:

- the average grade on the certificate (diploma);
- scores of two exams (if submitted) or scores of two final assessments, chosen by the applicant (see paragraph 2.1.4 of this report).

Since some of the students in the IT study program have already obtained a higher education or acquired a part of it, at the beginning of the each semester, the information on the submitted documents is compared with the relevant study program requirements. The grades received in the relevant study course during the previous education are recognized if the number of credit points is not less than the number of credits planned for one semester in RTC study program. In some cases, if the names of the study courses differ, students are asked to submit course descriptions.

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

Short-cycle higher professional education is an important tool for the growth of the Latvian economy, which is especially important for the improvement and development of engineering, including information and communication technology study programs. It is important to provide opportunities for obtaining professional higher education with a practical approach in a short period of time.

Currently, the focus of the study programs implemented by RTC is to prepare specialists with a pronounced practical focus. We believe that we are achieving this goal, as evidenced by the evaluation of qualification papers, descriptions of interns provided by employers, and the further activities of graduates in their chosen profession.

The IT industry offers not only a promising, but also an extremely wide range of job opportunities. According to forecasts from foreign ICT career centers, the most in-demand ICT specialists by 2030 are mobile application developers, whose demand could increase by more than 30% by 2030, as predicted. There is almost as high demand for database administrators, programming engineers, video game designers, and network administrators, and more and more employees who can ensure IT job security (programs and data) are being sought after. Demand will also rapidly increase for IT security specialists, system analysts, and web developers.

As information technology develops very quickly every year, based on the results of employer and

graduate surveys, the content of study programs and course descriptions is reviewed. If necessary, study courses, their topics, and/or evaluation criteria are modified.

To determine the interest of employers in the study field and graduates of the study program, the largest Latvian companies were surveyed and individual discussions were held with employer representatives. Graduates have opportunities to work in various information and communication technology companies, most of which are small and medium-sized enterprises, but a small part are large and/or international companies.

Employer representatives participate in the work of the State Qualification Commission, during which evaluations, recommendations for further collaboration strengthening, and improvement of the content of study programs are expressed. RTC also collaborates with representatives and managers from industry companies in Spain, Germany, Sweden, Estonia, Lithuania, Poland, and Romania. Their recommendations are also taken into account when planning the development of the field of study and future actions. Based on the survey and discussions, it can be concluded that:

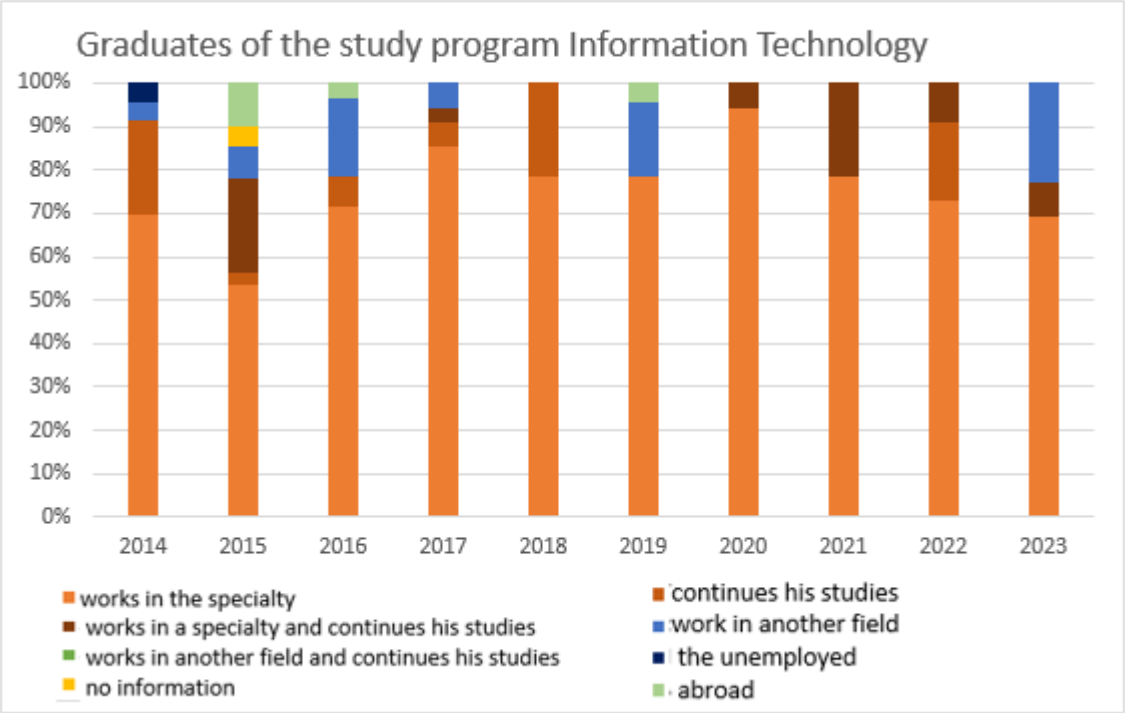
-employers highly appreciate RTC's work in implementing the study program and preparing new specialists;

-specialists are in high demand, and companies are willing to participate in the study process to provide the latest knowledge and skills on the latest technologies, so that students can more successfully enter the job market and work in the interests of companies;

-companies provide internship opportunities and future job and growth opportunities in industry companies.

Employers predict that there will be an increasing demand for industry specialists and there is already a permanent shortage. RTC supports companies in finding suitable interns and future employees to meet their needs. Job opportunities are extensive and it is possible to specialize in various fields.

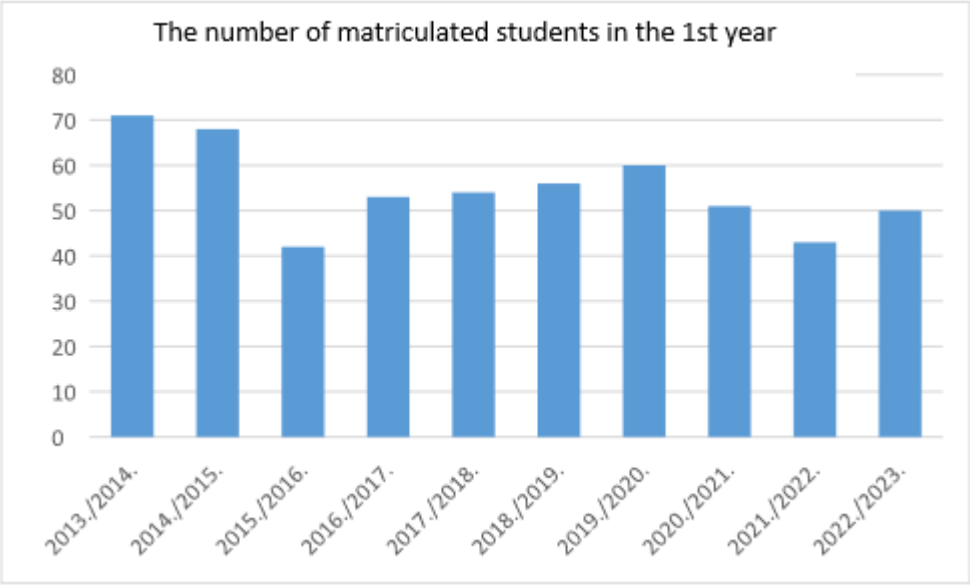
On average, 90% of program graduates work in their specialty, 8% continue their studies at other higher education institutions (University of Latvia, Latvia University of Life Sciences and Technologies, Riga Technical University), and 2% work in industry companies of EU member states.

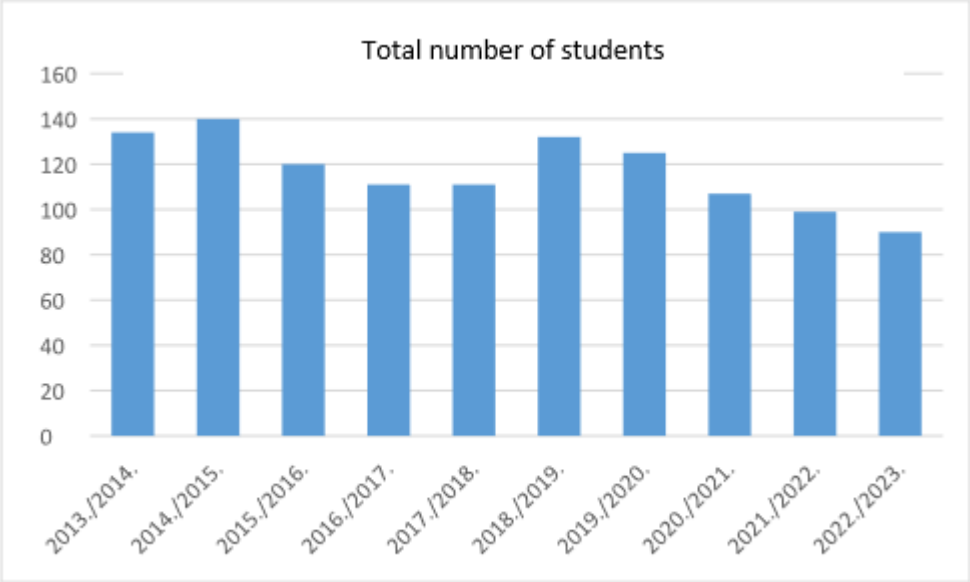


3.1.4. Statistical data on the students of the respective study programme, the dynamics of the number of the students, and the factors affecting the changes to the number of the students. The analysis shall be broken down into different study forms, types, and languages.

Due to the demographic situation in Latvia and the wide offer of studies abroad, the number of students has decreased.

During the reporting period, the number of students matriculated in the study program in the 1st year and the total number of students is changing, marking a trend related to the demographic situation in Latvia, as well as the wide opportunities offered to study abroad.





The overall number of enrolled students has decreased. However, we may observe certain stability in terms of the number of graduates. The (planned) number of graduates is affected by the fact that students may use the opportunity to take a leave of absence. The dropout rate is relatively high (see Annex 9), especially at the beginning of studies - in the transition from the first to the second year of studies. The main reasons for this are: insufficient knowledge in exact sciences, inability to fulfill course obligations, lack of motivation, or the decision to move from this type of learning to another type of studies - with different requirements, study intensity and work style. In order to support students, the college offers individual course lessons in the form of video recordings, thus allowing students to watch more difficult topics repeatedly, as well as free of charge individual tutorials during the study period, etc. The increase in the number of expelled students in the IT program is a problem not only at RTC. The Ministry of Economics in its 2022 report on the medium and long-term forecasts of the labor market prospects emphasizes that the students dropping out of STEM fields is still a significant problem - every year approximately 28% of students in STEM education programs drop out of their studies (see section 3.3.2). The most common reasons for dropping out are: failure to attend classes, failure to sign the study contract until deadline, failure to renew the studies after the leave of absence, due to family circumstances, failure to fulfill contractual obligations. There are also other reasons, such as lack of willpower and dedication, insufficient prior knowledge of the subject matter, as well as the inability of working students to

combine work with studies. It should be emphasized that the student dropout rate does not mean that all these students have left their studies. For example, students who are expelled because of academic debt often choose to resume their studies after a while. Dropout reduction is only possible if students find motivation to study. The college is always looking for different solutions to reduce the dropout rate.

For statistical data on students in the reference period, see Annex 9.

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

3.2. The Content of Studies and Implementation Thereof

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

The goal of the study program corresponds to the professional standard, the RTC vision, strategic aims and tasks. The main goal of the program meets the requirements of the labor market and students' interests, as it is aimed at preparing competent and competitive specialists, according to the demands set forth by employers and ever-changing labour market.

The aims and tasks of the study program are worked out in accordance with the objectives and tasks of each separate study course. General subject courses provide students with theoretical knowledge that allows them to successfully study the theoretical core courses of their specialty consequently allowing them to successfully study the professional qualification courses. (see Appendix - Compliance to the national standard, paragraphs 10.1 – LV and 10.2. – ENG).

The structure of the study program is organized in such a way that at the beginning of the studies there are mostly study courses which provide basic knowledge in the IT and computer engineering field, and at the end of the studies - study courses which ensure completion of special courses required for qualification. Such theoretical and professional set of knowledge, skills and abilities enables the student as future *Network and system administrator* to perform appropriate maintenance, service and improvement of devices and equipment.

The information included in the study courses (purpose, number of credit points, topics, additional

information) can be found in the study course descriptions. The information included in the study courses derives from the study course

goals and achievable results, which in turn are based on the program goal and

the results to be achieved. This information is reflected in the mapping of the study program. Every study course ensures achievement of one or more program outcomes.

According to the regulations of the MC No. 141, the study program consists of general education courses, industry specific courses and electives, namely part A - general education courses correspond to 30 ECTS credits, part B -

industry specific study courses correspond to 76 ECTS credits and part C – electives – correspond to 6 ECTS credits. To exercise academic freedom, students may choose 2 elective courses from the four study courses offered in the study plan. The rest of the study program consists of internship that corresponds to 8 ECTS credits, qualification internship - 16 ECTS credits, and qualification paper and its presentation/defence that corresponds to 14 ECTS credits.

The RTC administration, faculty, students, graduates and employers participate in the meetings and surveys to evaluate the content of the study program and study courses, teaching methods used, study process organization, lecturers and students' work quality, which in turn then is included in the self-assessment of the whole program.

The program director follows industry news and consults with representatives of the relevant industry and employers about the suitability of the content of the study program to the labor market needs and the results are then discussed with administration, lecturers, council and academic staff.

The program director, based on employers' recommendations in the students' internship reports and proposals expressed by the qualification examination commission, organizes faculty meetings to inform and make decisions regarding the updates and improvements that have to be made in the content of the study courses, the achievement of the expected results, the need for improvement of the study course (compliance of content with innovations in the field of IT, improvement of practical and independently done assignments, assessment criteria update, etc.).

The organization of study courses makes it possible to successfully link the learning outcomes of the courses. Thus, for example, if a student has successfully completed the theoretical core course *Computer networks*, it gives him/her an opportunity to successfully study the courses of specialization *Local computer network administration* and *Network operating systems*.

The planned outcome of the program is graduates who have the necessary professional competencies to perform professional tasks related to the computer system and computer network administration on their own. They are able to design, configure and administer computer systems and networks, ensure information protection and security, provide technical and advisory support to users, as well as prepare the necessary technical documentation (see Appendix - Compliance to

the professional standard, Paragraphs 11.1. – LV and 11.2. – ENG).

Successful learning of the study program is based on good prior knowledge acquired at the secondary education level, attitude towards studies and interest in computer systems and computer technology.

Since some of the students in the IT study program have already obtained a higher education or acquired a part of it, at the beginning of the each semester, the information on the submitted documents is compared with the relevant study program requirements. The grades received in the relevant study course during the previous education are recognized if the number of credit points is

not less than the number of credits planned for one semester in RTC study program. In some cases, if the names of the study courses differ, students are asked to submit course descriptions.

The results of regular student surveys show that students are becoming more and more satisfied with the study plan and program content. Taking into account the results of 2016 survey, from the general education course section, the study course *Latvia and Europe* was withdrawn. Instead, a study course *Fundamentals of Research* was introduced into the study plan. In 2023, *Physical education* course was withdrawn. For some study courses the planned achievable results and their evaluation criteria, as well as the independent task descriptions were specified.

The names of several study courses have been updated, based on the latest tendencies in the industry or to correspond more precisely to the content of the course, for example, the course *Economics* now is called *Fundamentals of Business*. Also, a new course *E-business* has been introduced.

The study program is built on the continuous development of the industry, modern technologies and latest tendencies within industry.

In the study program:

- a student-centered approach is implemented;
- there is a focus on study results;
- interdisciplinarity is introduced;
- alignment of the Latvian qualification framework with European qualifications framework is observed;
- emphasis is placed on the demands of the labor market, which from the young professionals require better and better digital and communication skills, ability to work in a team, excellent presentation skills, ability to solve problems, develop decision-making skills, be socially responsible personalities and observe ethical norms, be able to continuously improve their knowledge and skills, as well as people who possess critical and analytical thinking skills.

Lecture is the main form of studies at college. Lectures are held as face-to-face classes with students. The student's working hours consist of in-person classes and independent work. Besides lectures, the study course also consists of practical works, discussions, case studies. Lectures are held for all students together, if necessary, the group of students is divided. Practical works are organized in accordance with the study program; the work is carried out in the computer laboratories. Both faculty and students use the Moodle platform, in which study materials are posted throughout the academic year. Skills and competences are acquired at the companies during internship.

Hardware and software used in the IT industry is rapidly developing, that is why RTC regularly updates the study content, especially in the following study courses:

- Operating systems
- Computer systems and computer architecture
- Local networks and their administration
- Web technologies

The study course topics also cover the cyber security and data protection issues.

The program director is responsible for the development and update of the course descriptions. S/he organizes and chairs the faculty meetings, during which information is collected about the necessary improvements that will allow to reach the goals in terms of content and also if there is a necessity to update the achievable results.

Teachers develop lesson plans, assignments that students will have to do independently, and also choose appropriate teaching methods.

The achievable results of the study courses are related to the professional standard and are divided into:

- knowledge and understanding;
- skills – the ability to apply knowledge practically, and communicate;
- general skills in the field of study course.

Lecturers develop study course descriptions, assessment criteria for tests and final quizes, based on the goals of the study program and the professional standard.

The program director is responsible for mapping the results of the study courses, comparing program goals and achievable results to the professional standards, labor market demands, RTC graduates' image. Study course descriptions are approved at the ICT department meetings and posted in the Moodle system in the relevant e-course.

All study course outcomes are measured using Bloom's taxonomy (knowledge,

understanding, application, analysis, synthesis, evaluation). Each study course description contains evaluation criteria, which also descriptively include the relevant, expected results of the study course.

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

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

Student achievement assessment is carried out in accordance with the Cabinet of Ministers Regulations No. 305 of June 13, 2023, "Regulations on the State Standard of the State Professional Higher Education" and RTC's internal regulatory document "Regulations on the Basic Principles and Procedures for the Assessment of Higher Professional Education" (see Annex 34.1.).

Basic principles of evaluation are as follow:

1. accumulation of positive achievements;

2. compulsory assessment of the acquisition of the compulsory content included in the main parts of the study program;
3. openness and clarity of requirements regarding the set of basic requirements for the evaluation of the acquired education, in accordance with the aims and tasks of the study programs and study courses;:
4. the variety of test methods used in the assessment;
5. compliance of the assessment with the students' analytical and creative abilities, knowledge, skills and abilities;
6. the basic forms of study program acquisition evaluation are an exam and a test;
7. in the exam the acquisition of the study course is assessed in a 10-point system.
8. The completion of a study course is evaluated both on a 10-point scale and a pass/fail scale.

The results of study work are monitored and evaluated:

- during the semester;
- at the end of the semester - exams, tests;
- after completing the full study program - state examination.

During the semester, students' theoretical knowledge is tested and evaluated based on individual study work results: tests, essays, development of computer programs and databases, participation in discussions. The acquisition of practical skills is monitored by organizing practical tasks and internships. The forms of examinations during the semester are chosen to motivate students to work regularly and systematically.

Exams or passes are organized both in writing and orally. The final evaluation of the study course is obtained using the principle of adding up positive achievements. In the final evaluation, the exam accounts for 70% and the interim evaluations for 30%. This distribution may differ in different study courses.

After internships, students submit an internship report, which includes a description of the work done during the internship and an analysis of the results. The defense of internships is accepted by a commission.

The state examination consists of a qualification exam, which includes a qualification work. The qualification work is an individual work with a practical orientation. It should reflect the ability to select and systematize material, offer various problem-solving options, choose the most suitable solution, justify the choice, and format the qualification work.

This assessment system allows each student's individual abilities to be successfully demonstrated, motivates systematic work, and provides an opportunity to comprehensively assess a student's knowledge, skills, and abilities.

The implementation of the RTC study process takes into account the principles of student-centered education:

- students and graduates are regularly surveyed to identify problems in the implementation of study programs, make changes to study program and/or course content.
- As the majority of our students already work in the field, we support independence in studies by offering teacher consultations, distance learning, and study materials in the electronic environment MOODLE. RTC has developed an internal normative document "Regulations on Work in the Distance Learning Process".
- If necessary, we support studies according to individual plans. An internal normative document "Regulations on the Organization of Studies According to Individual Plans" has been developed.

- All teachers support students in the study process, but the study program director manages the program. If changes in the organization of the study process or career are necessary, students can receive support from the Study Department. RTC has developed an internal normative document "Code of Ethics" (see Annex 44.2.).
- Students have the right to appeal all decisions made by RTC officials, including teachers, to the director.

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

A 8-credit **internship in a company** is provided in the 4th semester of the study program.

Its goal:

- To help students become familiar with the duties of a computer system and network administrator in companies/institutions.
- To become familiar with information technology capabilities, basic principles of computer systems and network operations.

The qualification practice is designed for the 5th semester and consists of 16 credit points.

Its main goal: to prepare materials for the explanatory and practical part of the qualification work.

The goals of the internship program correspond to the goals of the study program: *prepare qualified specialists - computer systems and network administrators who ensure the optimal performance of computer hardware, software, and networks for the needs of users.*

Short-cycle higher professional education is an important tool for the development of the Latvian economy, which is particularly important for the improvement and development of engineering programs, including information and communication technology study programs. It is important to provide opportunities for obtaining higher professional education with a practical focus in a short period of time.

The study program "Information Technology" places greater emphasis on preparing specialists with a pronounced practical orientation. Therefore, the internship program is very significant for achieving the goals. as evidenced by the evaluation of qualification papers, descriptions of interns provided by employers, and the further activities of graduates in their chosen profession.

According to the regulations of the Cabinet of Ministers of June 13, 2023 (No. of Prot. 32 29§) No. 305 "*Regulations regarding the State Standard for Professional Higher Education*" paragraph 12.2. , the duration of internships provided by the study program corressponds to 24 ECTS credit points. The internship is divided into two parts: internship and qualification internship.

At the beginning of the 4th semester (in February) and before the beginning of the 5th semester (in July), students of the IT study program receive detailed information about the planned

internship/qualification internship that will take place in May/September. They are emailed the internship documentation, which includes an internship contract form with two attachments, and a description of the internship. Students have the opportunity to try to find an internship on their own. Students usually succeed in this. However, if they are unable to find a suitable placement, the college provides guidance on finding an internship place. Students choose the place of internship according to the general and individual goals of the practice. Internship places can be found in private companies, public institutions or organizations, for example, associations or foundations. When choosing a place of practice, it is important to ensure the opportunity to successfully and efficiently perform the internship tasks. If the job duties correspond to the chosen qualification, the internship can be done in the organization where the student already works. The internship place is approved by the head of practice of the college.

In order for the internship to be successful, the internship supervisor (director of the study program or other academic or administrative staff member) is approved and s/he is responsible for the organization and management of the internship. At the place of internship, the person responsible for managing the internship is appointed; s/he provides the student with full opportunities to complete the internship tasks. This includes working closely with the internship supervisor at the internship site and also at the college. The student resolves all issues related to the organization of the internship by communicating with the internship supervisors on both sides. Such cooperation helps ensure the successful outcome of the internship and allows the student to gain the necessary experience and skill development. During the internship, the student performs the tasks entrusted to him by the internship supervisor of the company and prepares an internship report describing the fulfillment of the internship tasks. Within the deadlines specified by the college, the student submits all the documentation related to the internship, as well as prepares a presentation about the internship process and presents it during the internship defence to prove that he is ready to start working in his chosen profession.

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

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

Most of our students already work in their chosen industry before developing their qualification work. Therefore, their qualification paper topics are closely related to the real needs of companies/institutions and have practical applications. Defending their qualification papers, students demonstrate that they have good theoretical knowledge and practical work experience. Modern information technologies and tools are used to solve tasks in qualification papers. Qualification papers are always of high quality in terms of formatting and presentation. The average grades for qualification papers are reviewed periodically.

Academic year	2013 /2014	2014 /2015	2015 /2016	2016 /2017	2017 /2018	2018 /2019	2019 /2020	2020 /2021	2021 /2022	2022 /2023
Number of graduates (with qualification)	17	33	26	34	17	22	35	14	22	13
Average score obtained in qualification exam	7.89	8.20	8.31	8.00	8.53	8.18	7.34	8.21	8.00	8.15

Each year, the State Qualification Commission evaluates several qualification works as excellent. For example, the following qualification works were evaluated as excellent:

1. "Improvement of Network Infrastructure in "Stream Network", Ltd.".
2. "Implementation of Computer Management Systems".
3. "Comparison of Network Management Programs".
4. "Selection and Implementation of Cloud Computing Technologies".
5. "Security of Wireless WiFi Network".
6. "Creation and Configuration of Server Cluster for Enterprise".

The qualification works are well-structured and were supplemented with presentation materials during their defense.

3.3. Resources and Provision of the Study Programme

3.3.1. Assessment of the compliance of the resources and provision (study provision, scientific support (if applicable), informative provision (including libraries), material and technical provision, and financial provision) with the conditions for the implementation of the study programme and the learning outcomes to be achieved by providing the respective examples.

The technical support is adequate.

As the study programs "Telecommunications" and "Electronics" are not currently being implemented, we provide information only on the material and technical equipment available to students and lecturers in the implementation of the study program "Information Technology".

Students have access to computer network, computer construction and operating system laboratories.

The electronics assembly workshop and electronics laboratory are equipped with equipment from the Swedish company "TEKLAB" and the German company "FESTO". Several computer classrooms and lecture halls with multimedia equipment are also available to students, where audio and video study materials are used. For scientific research purposes, freely available databases such as

Google Scholar, Mendeley, Microsoft Academic Search, and others can be used.

Operating systems that are used within the study process:

- Windows 10
- Windows Server
- Debian Linux
- Ubuntu Linux
- Mikrotik RouterOS
- Proxmox PVE

Applied software and services:

Virtualization:

- Hyper-V virtualization/containerization solution
- Oracle VirtualBox virtualization solution
- Proxmox Virtualization Environment virtualization/containerization solution

Domain management system (centralized user account management and access control):

- Windows Active Directory and related components
- Windows Network Policy service (RADIUS server service)
- Mikrotik RouterOS User Manager

Network services:

- Windows networking (IP, NAT, DNS, firewall, etc.)
- Linux/RouterOS networking (IP, NAT, DNS, firewall, etc.)
- RouterOS CAPSMAN (centralized wireless network management)

Server hardware and network equipment used in the training process:

- HP Proliant DL380 G6 servers with various performance options (12-core processors, 16GB RAM)
- HP Proliant DL380 G7 servers with various performance options (12-core processors, 48GB RAM)
- HP Proliant DL380 G10 servers with various performance options (12-core processors, 32GB RAM)
- Mikrotik RouterBOARD wireless access points - RB951, RB2011, CAP-AC, and HAP-AC models
- Mikrotik RouterBOARD network routers - RB1100AHX2, RB1100AHX4, and CCR1009 models
- HP Procurve network switches with various performance options
- Cisco Small Business network switches with various performance options
- Mikrotik RouterBOARD network switches - CRS125, CRS266, and CRS328 models

Tools for practical and laboratory work:

Specialized work table with a computer all-in-one and accessories:

- 3 in 1/HP ProOne 600 G3 21.5 NT AiO/Win 10 Pro 64/Intel Core i3-7100 3.9GHz/8GB (1x8GB) DDR4-2400/ 500GB/ USB BusSlim Keyboard/Optical USB Mouse/9.5 DVDRW/

Tool set:

6mm short and long screwdriver socket set. Includes TORX, PHILIPS, PZ1 and HEX standard size

sockets.

Tool set:

6mm socket screwdriver with magnetic handle.

Tool set:

Pliers and insulation removal set with CAT3 insulation resistance.

- Insulation removal tools
  - Cable cutters
- Tweezers

Power supply:

Programmable portable power supply for use with single-phase 230VAC power supply.

- At least 3 programmable outputs with current/voltage regulation,
- 2 outputs with at least 0-24v voltage regulation range,
- With built-in protection against overload and overheating.
- Linear power supply with at least 150W total output power.

Soldering station:

Portable programmable soldering station with temperature stabilization, for use with single-phase 230VAC power supply. Designed for fine soldering work (work with small surface mount components).

- Quick-change soldering tip construction
- At least 10W power
- With built-in solder holder and tip cleaner.
- Dual soldering system, with regular and tweezer soldering iron
-

Oscillograph:

Digital portable oscillograph. For tasks from a single-phase 230VAC power supply network.

Multimeter:

Portable digital multimeter. For tasks with built-in batteries or battery packs.

Portable oscilloscope with DMM functions:

Portable digital oscilloscope and multimeter (DMM). For tasks with built-in batteries or battery packs.

Mechanical screw presses:

Table-mounted screw presses.

120mm compression width, 65mm adjustment range.

Tool set:

Battery impact screwdriver. Comes with a charger and two 2 amp-hour batteries. Can be used as a drilling machine. Uses the common M12 battery series.

Tool set:

Battery-powered straight grinder with accessories. Helps with removing broken screws in hard-to-

reach areas, as well as dismantling metal and plastic sealed housings.

Uses the common M12 battery series.

Webinar room for organizing lectures/practical lessons.

Portable computer:

15.6", LED AntiGlare, Intel i3-5005U, 2.0GHz, 4 GB, 500 GB, Intel HD 5500 Graphics, HD 1366x768, Linux, ENG/RUS , 2.20 kg, DVD+/-RW

Document camera:

Lumens PS751

Portable WXGA projector

Motorized screen with remote control Kauber:

ECONO ELECTRIC 200

Microphones:

Desk microphone - RAZER SEIREN PRO ELITE XLR/USB DIGITAL MICROPHONE

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

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

RTK currently has **352** students studying using state budget funds, of the 352 70 are studying the "Information Technology" programm. This ensures the profitability of the program.

Total expenses on average are 1,781,112 EUR, of which 5,060 EUR is attributed to one student. For the study program "Information Technology”

Total expenses	Per 70 students in the program	Per student	Percent
	354200 EUR	**5060 Eur**	66
Work remuneration	232410 EUR	3320,14 Eur	16
Employer's mandatory social insurance contributions, social benefits, and compensation.	56426 EUR	806,09 Eur	11
Products and services	39128 EUR	558,97 Eur	0
For research	0 Eur	0 Eur	1
Fixed capital	3242 EUR	46,31 Eur	6
Social transfers	22994 EUR	328,49 Eur	66

The allocated funding could be higher, as it is insufficient in the "Fixed capital" section, as well as are not intended in the "Research" section. Since information technologies are developing very rapidly, it is necessary to renew computer equipment regularly in order to be able to educate students according to modern requirements. Unfortunately, funds are very limited.

In order to attract additional funds, we work in projects. The biggest benefit in recent years has been from project no. 8.1.4.0/17/1/001 "Infrastructure development of Riga Technical College".

Another possibility to attract additional funds is the opening of paid groups, but this would only be possible with a very large number of applicants and a low dropout rate during the study years.

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.

As information technology develops rapidly, the composition of teachers is gradually changing as

well. In recent years, there has been a trend to improve the quality of studies in the program, as the newly arrived teachers are younger, more energetic, and have a knowledge base that is relevant to modern times. This is also noted in student surveys and feedback on the quality of education.

According to statistics from the RTK annual report, on average 95% of graduates work in a profession that is relevant to their study program.

The qualification of all teachers involved in the implementation of the study program corresponds to the requirements of the study program. The professional development of teachers is supervised by the RTK Personnel Department, in accordance with Cabinet Regulation No. 569 of September 11, 2018 "*Regulations on the education and professional qualification of teachers and the procedure for improving the professional competence of teachers*".

Teachers regularly participate in various conferences and seminars organized by the Latvian Information and Communication Technology Association (LIKTA) and ICT industry companies. Teachers actively participate in various projects. During the reporting period, lecturers participated in the "ICT Security in VET" (CB36, ITSVET) project within the Central Baltic Sea Region INTERREG V-A cross-border cooperation program, as a result of which the requirements for the qualification "Information Systems Security Specialist" and a module plan, which is integrated into the study program "Information Technology", were developed.

As information technology is developing very quickly, the participation of lecturers in various conferences, seminars, and projects is necessary to keep up with the development and be able to provide students with the latest information.

The RTC vision is to become one of the leading engineering, information technology and communication specialist training and professional development centers in Latvia and Northern Europe. Thus an important strategic task of the college is to create a professional, motivated, united and capable academic staff team that would ensure the quality of the study programs offered by the college, according to the ever-changing labor market requirements.
Our faculty play an important role in the college; their experience and professionalism meet the requirements of the laws and regulations established in the country as well as the aims and tasks set by the college. The vision of human resources development of the college envisages that the lecturers are specialists in their respective fields; they are highly motivated and interested in high level achievements and professional development.
The study program is provided by sixteen college-elected academic staff members and seven guest lecturers. Their experience and knowledge is based on research, science, and practical experience. They also cooperate closely with the Latvian companies working in the respective industries. **A total of twenty-three faculty members are involved in the implementation of the study program, five of whom have a doctor's degree in science and twelve lecturers have a master's degree in science, according to the study course they teach**.
Among the guest lecturers involved in the study program there are representatives of the information technology industry and teaching staff from other universities. Their experience and knowledge about the current industry trends and the future development directions ensure the achievement of the program tasks and overall goals of the studies.
The faculty members take part in the international European mobility Erasmus+ program activities in foreign universities and companies, improving their professional competencies, digital and foreign language skills. As a result, the international experience they have obtained increases their knowledge and skills, and motivates them to get involved in the development and upgrade of the study program and the college.
The teacher of the study program Igors Būmanis (Bc.sc.comp.) regularly participates in the

international EuroSkills competitions for young professionals as an expert in information and communication technologies.
Since the last accreditation of the study program, new faculty members have been recruited:
- Intars Pučurs (Mg.oec)
- Nikolajs Brerners (Dr.sc.ing)
- Igors Būmanis (Bc.sc.comp.)
- Natallia Karatun (Mg.sc.comp.)
- Nellija Bogdanova (Dr.sc.comp.)
- Andrejs Bubovičs (Mg.sc.ing.)

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.

With the rapid development of information technologies, the faculty is also undergoing changes. Over the last years we have been able to see the improvement in the quality of studies. It can be explained with the fact that the newly recruited lecturers are younger, more energetic, possessing up-to-date knowledge and competencies in their area of teaching. Students mention this in surveys as one of positive tendencies in the study process.
RTC's annual yearbook provides statistical data showing that on average 95% of graduates work in the profession that they studied at the college.
The cooperation of faculty memebers takes place in various ways in order to promote the realization of the general program and improvement of the study process:

- curriculum committee’s meetings: lecturers regularly participate in the meetings of curriculum committees during which they discuss and analyze the reports and plans connected with the study curriculum. In these meetings, the lecturers join forces to work out new teaching materials and new methods to improve the study process;
- individual discussions with the study program director: lecturers communicate with the study program director to discuss questions and problems related to the study program implementation and development;
- lecturers regularly communicate and share ideas and examples of good practice. This collaboration takes place in both formal and informal settings;
- lecturers form research groups that put forward proposals about the development of innovations and research;
- extracurricular activities: lecturers participate in the creation of extracurricular activities and offer students opportunities to gain educational and practical experience outside the classroom. These may include study trips to companies, guest lectures from industry experts or creative workshops;
- e-communication: lecturers use Moodle, Zoom, MS Team and other digital resources to exchange ideas, materials and experiences related to the study program or RTC activities.

These forms of cooperation allow lecturers to work together to ensure an efficient study process, as well as promote experience exchange and mutual cooperation.

3.4.3. Information on the number of the scientific publications of the academic staff members, involved in the implementation of doctoral study programme, as published

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

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

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

Collaboration among program faculty is encouraged through both formal and informal means. Course descriptions are reviewed and posted on the Moodle platform before the start of each semester based on the lecturer's decision. Study courses are reviewed by the director of the study program, ensuring that courses do not overlap. During the academic year, study program faculty meetings are organized with the participation of study program lecturers, students and industry representatives.

Department meetings are held once a month with an aim to discuss the most important topical issues connected with the study programs offered by the department, and the newest tendencies in the industry.

Teaching staff from the professional and academic environment participate in the implementation of the study program, which helps to achieve the goals and results of the study program.

Faculty teamwork is facilitated in separate ICT department meetings, in individual conversations with the director of the study program, in mutual communication between teaching staff, as well as in joint meetings with RTC teachers, discussing various topical issues in the educational institution, higher education and professional field.

The study program faculty members cooperate in order to implement and update the content of the study courses; they also agree on the topics to be taught to avoid an unnecessary overlap of subjects.

At the same time, the faculty members also participate in creating an offer of non-academic activities for students, for example, providing study excursions to companies, or attracting industry guest lecturers who might deliver lectures on an important or topical issues for the industry (IT security, IT innovations etc.).

The academic and scientific qualifications of the faculty of the study program, their professional work experience in the relevant sector, regular attendance of professional development seminars fully comply with the conditions of the study program implementation and the requirements of regulatory documents. The professional development of teachers is supervised by RTC Personnel Department, in accordance with the Cabinet of Ministers Regulation No. 569 of September 11, 2018 *Regulations on the necessary education and professional qualifications for teachers and the procedure for improving the professional competence of teachers*.

Among the guest lecturers involved in the study program are representatives of the information technology industry and teaching staff from other universities, whose experience and knowledge of the current trends in the industry and further direction and perspectives of development are useful and ensure the achievement of the results set for the respective study courses and the study program as a whole.

The teaching staff of the study program also participate in the activities of the international European mobility Erasmus+ program in foreign universities and companies, improving their professional competencies and perfecting digital and foreign language skills, as a result of which the international experience gained by them increases the self-esteem of the lecturers and motivates them to further promote the development and modernization of the college and the study program.

23 lecturers have been hired to teach in the study program. The number of places financed by the state budget in the program - an average of 70 students per year. This means that there are 3 students per lecturer.

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	50. Diploms un pielikums.7z	50. Diploms un pielikums.7z
For academic study programmes - Opinion of the Council of Higher Education in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions (if applicable)		
Compliance of the joint study programme with the provisions of the Law on Higher Education Institutions (table) (if applicable)		
Statistics on the students in the reporting period	9.2. Statistics on students in the program-EN.docx	9.1. Statistika par studējošajiem programmā LV.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	10.2.Compliance with the national educational standard - EN.pdf	10.1. Atbilstiba valsts standartam - LV.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)	11.2.Compliance of the Studu Program with theStandart-EN.docx	11.1Atbilstiba profesijas standartam - LV.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	12.2. Mapping of the Study program - EN.docx	12.1.pielikums Studiju kursu kartejums.docx
The curriculum of the study programme (for each type and form of the implementation of the study programme)	13.2.SP plan - EN.xlsx	13.1.SP plāns _ LV.xlsx
Descriptions of the study courses/ modules	Studiju kursu apraksti EN.pdf	Studiju kursu apraksti LV.pdf
Description of the organisation of the internship of the students (if applicable)	6.2 Organization on intership.zip	6.1 Prakses organizacija.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)		