APPLICATION

Studiju virziena "Management, Administration and Management of Real Property" for assessment

Study field	Management, Administration and Management of Real Property
Title of the higher education institution	Latvijas Lauksaimniecības universitāte
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Self-evaluation report

Study field "Management, Administration and Management of Real Property"

Latvia University of Life Sciences and Technologies

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I - Information on the Higher Education Institution/College

1.1. Basic information on the higher education institution/ college and its strategic development directions, including the following information:

Latvia University of Life Sciences and Technologies (LLU) is the _fourth largest university in Latvia_ (established in 1936 as an independent higher education institution) that implements studies and research for various industries of the national economy and has built up relevant educational and research competence and expertise in:

- the following unique fields: agriculture, forestry, veterinary medicine, food technology and landscape architecture;
- and the following universal fields: information technology, economics and social sciences, agricultural engineering, environmental sciences, construction and pedagogy.

LLU:

Vision – Latvia University of Life Sciences and Technologies is one of the leading science and technology universities of the Baltic Sea region, with a specialisation in the sustainable exploitation of natural resources to improve the life quality of society.

Mission – to build internationally competitive intellectual potential based on excellence in research, application of research results in the economy, high quality of studies and effective university administration.

LLU long-term goals:

1. Excellence in research that promotes technology and innovation and is integrated into the study process.
2. High-quality studies that provide the development of internationally competitive specialists.
3. Effective university administration that ensures the targeted and efficient use of resources for high-quality studies and excellence-focused research.

LLU medium-term objectives are subordinated to the vision, the mission and the long-term goals and are as follows:

1. Excellence in research.
2. Application of research results in the national economy (research results are understood to mean the University's knowledge, technology and innovation accumulated and generated).
3. Integration of studies and research.
4. Internationalisation of studies and lifelong education.
5. High quality and competitive studies meeting the current demand.
6. Diversified supply of lifelong education that meets the current demand.
7. Effective university administration at all the levels.

The LLU Development Strategy for 2015-2020

(https://www.llu.lv/sites/default/files/2019-06/Startegy.pdf) prescribes three action programmes with relevant targets to achieve the long-term goals:

1. Research Programme;
2. Education Programme;
3. Administration Enhancement Programme.

LLU is comprised of the following eight faculties:

1. **LF** – the Faculty of Agriculture (established in 1863);
2. **VMF** – the Faculty of Veterinary Medicine (established in 1919);
3. **MF** – the Forest Faculty (established in 1920);
4. **TF** – the Faculty of Engineering (established in 1944);
5. **VBF** – the Faculty of Environment and Civil Engineering (established in 1947);
6. **PTF** – the Faculty of Food Technology (established in 1948);
7. **ESAF** – the Faculty of Economics and Social Development (established in 1968 as the Faculty of Agricultural Economics; in 2013, the Faculty of Economics merged with the Faculty of Social Sciences);
8. **ITF** – the Faculty of Information Technologies (established in 2001).

Totally, the LLU Faculties implement **59** study programmes within **14** study directions (data as at 1 October 2019).

Table 1.1

Number of students in the LLU study directions

B – bachelor programmes; M – master programmes; D – doctoral programmes

No.	Study direction	Number of programmes				Number of students (01/10/2019)	Faculties
		Total	**B**	**M**	**D**		
1	Agriculture, forest management, fishing, veterinary medicine and food hygiene	**10**	4	3	3	**1133**	LF, MF, VMF
2	Architecture and construction	**10**	5	2	3	**441**	VBF
3	Production and processing	**8**	4	2	2	**409**	PTF, MF, TF
4	Information technology, computer engineering, electronics, telecommunications, computer management and computer science	**4**	2	1	1	**268**	ITF
5	Environmental protection	**3**	1	1	1	**103**	VBF
6	Health care – a joint programme with LU and RSU	**1**		1		**17**	PTF
7	Mechanics and metalworking, heat power industry, heat engineering and mechanical engineering	**5**	3	1	1	**302**	TF

No.	Study direction	Number of programmes				Number of students (01/10/2019)	Faculties
		Total	B	M	D		
8	Power industry, electrical engineering and electrical technologies	**1**	1			**103**	TF
9	Sociology, politology and anthropology	**2**	1	1		**54**	ESAF
10	Economics	**3**	1	1	1	**386**	ESAF
11	Management, administration and real estate management	**6**	2	3		**320**	ESAF
12	Hotel and restaurant service, tourism and recreation organisation	**1**	1			**137**	PTF
13	Internal security and civil defence	**1**		1		**60**	MF
14	Education, pedagogy and sports – **the direction to be closed in 2023**	**5**	2	2	1	**112**	TF
	Total	**59**	**27**	**19**	**13**	**3845**	

LLU personnel, job positions and age group statistics information are in Table 1.2.

LLU personnel, job position and age group statistics

	Total	incl. women
University personnel	**995**	**668**
incl. academic personnel who have been elected at LLU	**322**	**199**
professors	58	35
associate professors	55	32
assistant professors	59	44
lecturers	39	30

assistants	0	0
leading researchers and researchers	112	52
Academic personnel – professors, associate professors, assistant professors, lecturers or assistants – who are also elected as leading researchers and researchers	X	107
Other personnel	**673**	**469**
Academic personnel who have not been elected at LLU (visiting professors, visiting assistant professors, visiting lecturers)	**147**	**95**
of which foreign visiting professors, visiting assistant professors, visiting lecturers	**1**	**0**
Distribution of *academic personnel* by age:		
under 25 years	0	0
25–29 years	1	1
30–34 years	28	15
35–39 years	53	28
40–44 years	49	37
45–49 years	36	26
50–54 years	26	21
55–59 years	33	25
60–64 years	43	25
65 years and over	53	21

Of the total academic personnel, 242 individuals have a scientific degree (73.78%).

LLU promotes and supports the engagement of young teaching personnel in academic work. Of the current academic personnel, 52% are aged less than 50 years, 32% are aged from 50 to 65 years and only 16% are aged over 65 years.

Changes in the number of students of LLU. In the period from the academic year 2013/2014 to the academic year 2019/2020, the total number of students was more than 4000. The decrease in the number of students over the six-year period reflects overall negative demographic trends concerning reproduction of population and migration. The total number of students at LLU decreased by 18% over the six-year period, yet a positive fact is that the number of students tends to stabilise. Overall, the total number of students was affected by the processes occurring in the

country: 1) the number of individuals who finished secondary school decreased by 20% in the reference period; 2) the number of individuals who finished secondary school and continued their education at university was very volatile from year to year: a 5% decrease in 2015 and 2017 and a 1-2% increase in 2014 and 2018. At present (in 2019), the total number of students is at the stage of stabilisation, as no negative trend, compared with the previous year, was observed in the number of students studying at LLU.
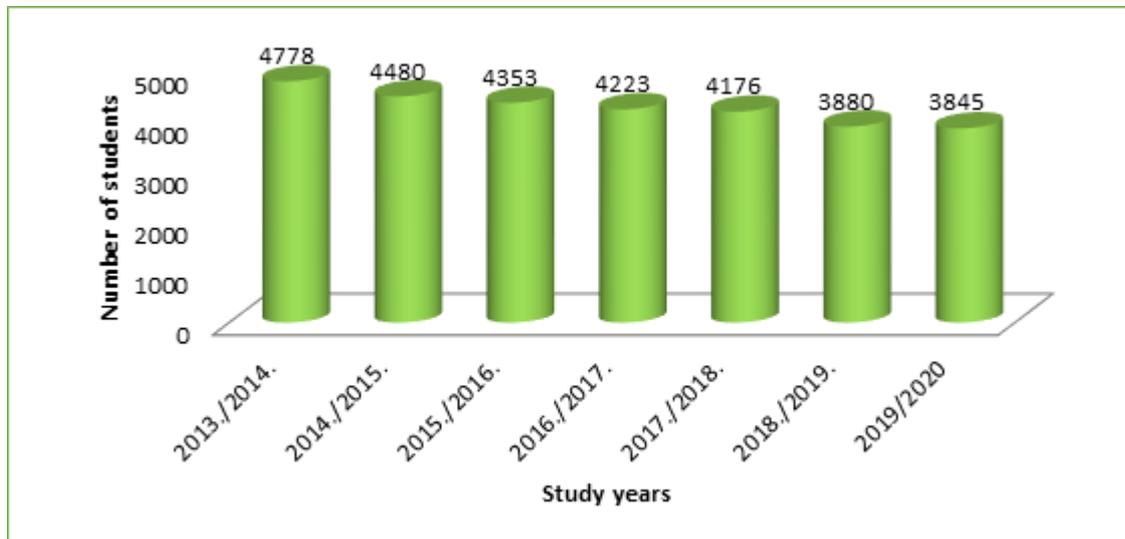
Fig.1.1. Changes in the number of students at LLU in the period 2013-2019

The university succeeded in neutralising the external factors affecting the number of students, and a number of reasons for the decrease in the number of students have been currently established; the reasons could be identified after the matriculation of students. The major reasons are as follows:

1. The number of students who stopped their studies during the first semesters owing to the wrong study programme or study direction chosen, their jobs or private life problems considerably increased;
2. First-year students often stopped their studies at LLU because they could not combine their jobs with their studies;
3. Some students could not continue their studies because of financial problems or because the schedule of studies, especially for working part-time students, could not be reconciled with their working hours;
4. Individuals' interest in doctoral studies tended to decrease because financial support for doctoral students was insufficient (the monthly scholarship was set at EUR 113.83) and the availability of funding for research was limited.

The breakdown of students by level of studies at LLU in the reference period was as follows:

1. Bachelor studies – 83-84%;
2. Master studies – 13-16%;
3. Doctoral studies – 4%.
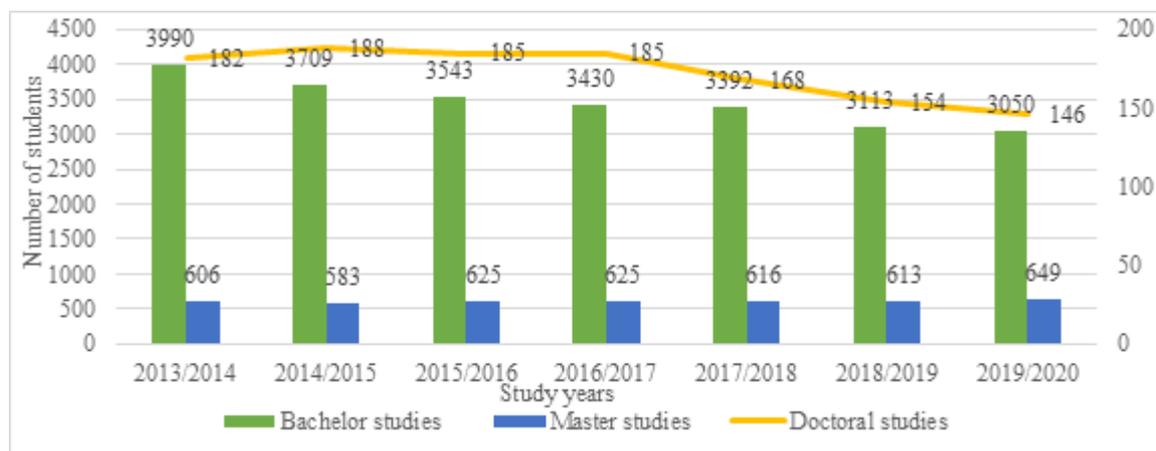
Fig.1.2. Breakdown of students by level of studies at LLU 2013.-2019.year

An analysis of changes in the number of students broken down by level of studies allows concluding that the numbers of bachelor and master students were the most volatile (negative trend). The decrease in the number of bachelor students could be rationally explained: over the six-year period, several study programmes were consolidated; the regional affiliates of LLU were closed; a decrease was observed for part-time students in particular. The decrease in the number of doctoral students could be explained by the insufficient amount of funding allocated to science and research as well as the fragmented nature of that funding.

The main activities that LLU carried out to increase its number of students:

1. In the academic year 2015/2016, LLU began admitting foreign students studying in English. In the academic year 2019/2020, 112 foreign students studied at LLU in 11 study programmes (at all the levels of studies);
2. Students are given an opportunity to acquire a bachelor's degree of social sciences in sociology in the form of e-studies.
3. In the conventional study process, teaching personnel intensively employ the Moodle system as a support tool for e-studies (learning materials, multiple choice tests, tests, homework etc.);
4. Infrastructure for studies and research has been enhanced and modernised.
5. Opportunities to get a scholarship paid by patrons tend to increase.
6. LLU provides doctoral students with internal research grants.

Research activities and motivation measures for teaching personnel are defined in the LLU Development Strategy and the relevant targets set have to be achieved by the Faculties, administrative centres and scientific institutes and laboratories. Each organisational unit of LLU approves these plans for an annual period. The decision-making bodies of the organisational units have to approve the targets set and the achievement of the targets. Each organisational unit collegially reports on the progress made to the LLU rectorate, and the details of the implementation of the plans are published on the LLU intranet: https://mans.llu.lv/lv and are available to teaching personnel and students.

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

In making **strategic decisions** on LLU, the following key (collegial) institutions are involved:

The **Council** is a supreme collegial representation, management and decision-making body for academic and scientific matters authorised by the personnel of LLU.

The **Council**:

- approves and amends the Constitution of LLU;
- elects and dismisses the members of the Senate of LLU;
- elects and dismisses the rector of LLU;
- elects the Academic Arbitration Court of LLU and dismisses its members;
- hears reports by the Senate, the rector and the Academic Arbitration Court;
- approves and amends regulations on electing the Council, electing and dismissing the rector and the statutes of the Senate and the Academic Arbitration Court;
- discusses and makes decisions on conceptual matters on the performance and development of LLU.

The Council is composed of 240 members who are elected by the organisational units of LLU by secret vote for three-year terms in the following composition:

- 160 academic personnel (67%);
- 50 students (21%);
- 30 other personnel (13%).

The Council functions in accordance with its Statute, which is available at:
https://www.llu.lv/sites/default/files/2019-02/Konventa_nolikums_2019.pdf

The **Senate** is a collegial management and decision-making body of the personnel of LLU, which approves the rules and regulations that govern all the spheres of LLU activity, with the exception of those that fall within the remit of the Council in accordance with the Constitution of LLU.

The Senate is approved by the Council for a period of three years. The Senate consists of 60 senators, of which:

- 41 are representatives of academic personnel who represent all the Faculties (68%);
- one representative of other personnel (2%);
- the rector of LLU, the vice-rectors for studies and science and the chair of the Council as representatives of academic personnel, the director and financial chancellor of LLU as representatives of other personnel (10%);
- 12 representatives of students who have been nominated by the Student Self-government (20%).

The Senate functions in accordance with its Statute, which is available at:
https://www.llu.lv/sites/default/files/2019-02/Senata_nolikums_2019.pdf

Ordinances, decisions and rules in relation to the matters pertaining to the basic activity of LLU are also passed, within the scope of competence, by:

1. Rector;
2. Vice-rectors for studies and science;
3. Financial chancellor;
4. Director;
5. Deans of the Faculties.

The Faculties and research institutes of LLU as well as their collegial administrative bodies are defined in relevant statutes and internal order rules.

Annex 1 provides a list of main internal documents of LLU.

Annex 1 shows the LLU administrative structure.

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, as well as the stakeholders involved in the development and improvement of the quality assurance system and their role in these processes.

Quality management system at the University. The quality management of study processes is part of the overall quality management system of LLU. Since 2016, the quality management system of LLU has been based on international standards for excellence (*see Investors in Excellence Standard, www.investorsinexcellence.com*).

The quality management system of LLU is externally audited every two years (audits may be done by the organisations recognised by the Investors in Excellence organisation, which either grant or do not grant an Investors in Excellence certificate to the organisation audited). Such a certificate was granted to LLU both in 2016 (first audit) and in 2018 (repeated audit).

The quality management system of LLU is part of the overall LLU Development Strategy and covers a broad spectrum of matters. A general description of the LLU Quality Management System and the Quality Assurance Plan are available at https://www.llu.lv/sites/default/files/2016-10/KV_cepure_4_1.pdf.

Quality management system in the context of studies. The quality management system of LLU covers all the spheres of LLU activity. The academic personnel and other employees of LLU are involved in the quality management system. The coordinating body of the quality management system is the Administrative Centre of LLU, which is subordinate to the rector.

LLU has developed a detailed joint scheme of study processes that includes 90 major study processes, their sequence and interaction. Each of the 90 processes is described and arranged sequentially.

The description contains the following parts: activities; responsible organisational units and employees; reference to the legislative or regulatory framework governing the activities. The detailed joint scheme of study processes provides a common approach to study processes across all the organisational units.

The descriptions of quality of studies at LLU are restricted access documents and are intended for internal use at LLU as well as are part of the management and strategic documents of LLU.

Detailed information on the internal quality management system and its effectiveness is contained in Section 2.2 of the self-assessment report, describing, assessing and defining the quality management system in the context of a particular study direction.

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 21 of the Law on Institutions of Higher Education 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 evidence for the full compliance, partial compliance or non-compliance.

1.	The higher education institution/ college has established a policy and procedures for assuring the quality of higher education.	Complies
		Investor in Excellence certificate issued in 2016 Detailed information is provided in Section 1.3 and 2.1. of the report
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.	Complies
		New study programmes are developed in accordance with the regulation approved by the Senate – the Regulation regarding Drawing up, Approving and Changing Study Programmes (No. 10-5 of 13 March 2019) The Regulation stipulates that: 1. A programme shall be developed by a Faculty, discussed by the Methodological Commission of the Faculty and approved by the Board of the Faculty; 2. The programme developed shall be discussed by the Board of Studies and recommended for approval by the Senate; 3. The Senate shall approve the programme and a director for the programme; 4. Relevant documents shall be submitted to the Academic Information Centre for being licensed; 5. New students shall be admitted to LLU and enrolled on the programme after the licence has been granted. Every year, annual reports are drawn up for all study programmes; the reports are approved by the Senate and published on the LLU website. https://www.llu.lv/lv/studiju-un-reglamentejosie-dokumenti

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.	Complies
		The student learning outcome assessment system is described in: • the Statute of Studies (bachelor and master studies). • the Statute of Doctoral Studies. The requirements for assessing student learning outcomes for each particular course are given in course curricula available in Latvian and English in the LLU IS course register at https://lais.llu.lv/pls/pub/kursi.startup?l=1
4.	Internal procedures and mechanisms for assuring the qualifications of the academic staff and the work quality have been developed.	Complies
		LLU has developed procedures and regulations (approved by the Senate) to guarantee the qualifications and work quality of academic personnel: 1. The LLU Regulation regarding Elected Academic Positions. 2. The Regulation regarding the Calculation of Academic Workload. 3. The Motivation System for LLU Academic Personnel. 4. Classes for students are scheduled in accordance with the procedures approved by the Rector – for full-time studies, classes are scheduled in a centralised way, while for part-time studies it is done by each Faculty. Class schedules are publicly available two weeks before the beginning of the semester (for part-time studies – before the beginning of the examination period).

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.	Complies
		LLU uses an information system that aggregates information about the entire study process of each student (decisions on the student, marks earned, payments made). Every semester, a survey of students is conducted on the courses taken, satisfaction with the way the courses are organised, the content of the courses and the teaching personnel delivering the courses (electronic questionnaire). The survey results are available to each teaching personnel member, study programme directors, department/institute directors, deans of the Faculties and the vice-rector for studies. For financial planning and accounting, LLU employs the accounting system Horizont that is a single system connected with the Ministry of Agriculture. Every year, the achievement of the goals and targets set by the LLU Development Strategy is reported at different levels: Faculties – at dean office meetings; Administrative units – at the Board of Studies; Vice-rectors, the financial chancellor and the LLU director – at rectorate meetings; Rector – at Council meetings.
6.	The higher education institution/ college shall ensure continuous improvement, development, and efficient performance of the study direction whilst implementing their quality assurance systems.	Complies
		Study direction reports are produced every year, which are reviewed by the Board of Studies and approved by the Senate. Once approved, the reports are made public on the LLU website - https://www.llu.lv/lv/studiju-un-reglamentejosie-dokumenti

II - Description of the Study Direction (1. Management of the Study Direction)

1.1. Economic and/or social grounds for the creation of the study direction and the relevant study programmes, the assessment of the interrelation among the study programmes, as well as the analysis of the significance (singularity) of the study programmes in comparison with other similar study programmes in Latvia and abroad.

The strategic and social justification for developing the field of study is based on the strategic documents of the European Union, the Republic of Latvia and Zemgale planning region:

The   EU   growth   strategy   Europe   2020

(https://ec.europa.eu/eu2020/pdf/COMPLET%20EN%20BARROSO%20%20%20007%20-%20Europe%202020%20-%20EN%20version.pdf) **that sets the most important growth dimensions**: smart growth: developing a knowledge- and innovation-based economy; – sustainable growth - promoting a more resource-efficient, greener and more competitive economy; – socially inclusive growth – promoting an economy with a high employment rate and ensuring economic, social and territorial cohesion.

The National Development Plan 2020 (https://www.pkc.gov.lv/sites/default/files/inline-files/NDP2020%20English%20Final___1.pdf) that defines the role of education in regional development and the formation of development centres: "It is necessary to increase economic activity in the regions and development centres by mobilising and exploiting the resources of surrounding areas, supporting the development of business, transport and ICT infrastructures, purposefully exploiting and developing the potential of education institutions and promoting the mobility of citizens".

The field of study and the programmes included therein are fully consistent with one of the priorities set by the **National Development Plan 2021-2027** (https://www.pkc.gov.lv/sites/default/files/The%20Latvian%20National%20Development%20Plan%202021-2027%20-%20Summary_pdf.pdf) – **knowledge and skills for personality and national growth** – that focuses on the size and quality of knowledge and skills, which is an important resource for individual and national growth needed for acquiring the necessary skills and knowledge, having a good job, doing business or creating a new practical/theoretical knowledge.

The **Zemgale Planning Region Sustainable Development Strategy 2015-2030** (https://www.zemgale.lv/attistibas-planosana/planosanas-dokumenti/category/34-zpr-ilgtspejigas-attistibas-strategija-2015-2030) highlights the region's competence, role and development pathways based on the contribution of Latvia University of Life sciences and Technologies (LLU) to the region. The economic specialisation of Zemgale region contributes to the implementation of long-term development priorities by putting people in the centre of economic development and promoting employment and creative activities of the population of Zemgale region through business development, where an important role is played by education, science and innovation to be developed in close cooperation with businesses, supplying both necessary specialists and innovative products and technological solutions. **Latvia University of Life sciences and Technologies plays a significant role in the potential of higher education and scientific activity in the region**.

The field of study and its programmes are implemented **in accordance with the LLU Development Strategy 2015-2020** – its sections on studies and scientific research highlight the objectives in the field of social sciences and the targets to be achieved to implement the strategy (https://www.llu.lv/sites/default/files/2019-06/Startegy.pdf). In addition, the LLU strategy stresses the need for this field of study, since the social science field of study constitutes the university's opportunities for horizontal cooperation with other unique fields the university deals with (e.g. food technologies, agriculture, forestry), while also developing a vertical cooperation pathway in learning and research, focusing on the practical transfer of knowledge, research and knowledge-based business expansion.

The field of study contains five programmes.

Table 2.1

Programmes contained in the field of study

No.	Name	Degree and/or qualification acquired

1.	Business Studies, Level 1	Business specialist
2.	Entrepreneurship and Business Management, p(b)	Professional bachelor degree in entrepreneurship and business management and a business manager
3.	Business Management, p(m)	Professional master degree in business and management and a General Manager of Organizations
4.	Project Management, p(m)	Professional master degree in project management and a project manager
5.	Agri-food Business Management a(m) (joint international LV, LT, EE programme)	Master degree of social sciences in management

Level 1 – first-level professional programme

p(b) – professional bachelor programme

p(m) – professional master programme

a(m) – academic master programme

The field of study and programmes contained therein are designed to meet the succession of programmes and the possibility for the student to continuously develop his/her learning strategies. Such an approach makes it possible to:

- sequentially build up competences by studying the same field. Completing a first-level professional programme, the student could continue his/her studies in a professional bachelor programme and sequentially continue the studies in a professional master programme or an academic master programme (see Table 2.1);
- develop knowledge, skills and competence through a learning strategy that focuses on a narrow specialisation in master studies (e.g. Project Management or Agricultural and Food Business Management);
- ensuring synergetic development of crystallisation centres at LLU (generating synergies with the unique fields of LLU – food technology, food safety, agriculture, forestry, environmental development, regional planning etc.);
- graduates from other universities in resource-intensive and unique fields could continue their studies in master programmes (e.g. a University of Latvia bachelor graduate in pedagogy could study business management, a University of Latvia bachelor graduate in biology could study project management, a National Defence Academy of Latvia graduate could study business management).

After ***comparing the mentioned programmes*** with other programmes implemented in Latvia and abroad, it could be concluded that the programmes included in the field of study are important for the economic, social and knowledge-based development of Latvia. Several unique advantages have been identified when designing and implementing the programmes, as well as certain competitive advantages, compared with the other national and foreign programmes, have been established.

Compared with the other same-level programmes implemented in Latvia, the programme **Business Studies** does not differ significantly, yet some universities give an opportunity to take courses through distance learning, while other universities deeply specialise (e.g. small enterprise

management, finance, personal management, marketing). The LLU programme Business Studies is accurately aligned with career opportunities, labour market needs and professional opportunities (the programme is fully aligned with the profession of business specialist).

The programme Business Studies was compared with the programme Business and Management of Riga Technical University (RTU), where students acquire the qualifications of a specialist in logistics and a specialist in marketing as well as the programme Commerce of the College of Law, where graduates acquire the qualifications of a specialist in commercial activity. The comparison of the programme with other programmes implemented in Latvia showed that the programmes were equivalent in terms of curriculum and structure, and differences emerged in the offer of elective courses and in specialisation.

The programme Business Studies was compared with the programmes delivered by the following EU Member State universities: the College of Business Studies Cyprus – the programme General Business (2 years, 120 ECTS); Copenhagen Business Academy – the programme Marketing Management (2 years, 120 ECTS), and no significant differences in programme curriculum and offer of the courses to be taken were identified.

However, the comparison revealed that the purposes of implementing a first-level (college) programme at a university could be diverse:

- for students, it is a starting point for career growth and purposeful and sequential progression towards continuing studies at higher levels. Accordingly, at the first level, such a programme traditionally focuses on equipping students with the knowledge of core business areas, and then graduates are guided towards studies in a bachelor programme. Next, earning a bachelor degree makes it possible to continue studies in a master programme (three semesters). Such an opportunity is provided also by the LLU programme, and some students have chosen this pathway;
- it is a point for acquiring higher professional education, making a career corresponding to the professional field; college-level education is sequentially acquired after having been graduated from a secondary vocational school or a specialised vocational secondary school. Besides, in our case, this opportunity is associated with the Bulduri Horticultural Secondary School that is subordinated to LLU and offers to acquire a third-level professional qualification in several specialities, including horticulture, tourism and hospitality.

The development and promotion of the professional bachelor programme **Entrepreneurship and Business Management** is strongly associated with labour market needs and the long-term goals and priorities set at the national level. Three industries – manufacturing, trade and commercial services – are projected to increase the demand for labour in Latvia by 2022. The Ministry of Economics of the Republic of Latvia projects the demand for high-qualification specialists, especially in the commercial services industry, as well as commercial and management specialists to increase. The National Development Plan 2021-2027 emphasises the productivity and competitiveness dimension, which stresses the possibility, as a result of innovation, to create and sell high value-added exportable products and services, raise productivity, improve cost efficiency as well as the ability to find new markets. Consequently, the programme Entrepreneurship and Business Management has a **competitive advantage**: the curriculum of the programme and the way it is implemented not only ensures the development of high-level management professionals but also entrepreneurs for starting up their own businesses. Data on the programme's alumni show that some of the trained professionals became entrepreneurs and that private business reduced the disproportion between the demand for and supply of labour in social sciences. The following competitive advantages were also confirmed by a study, commissioned by the State Chancellery in 2015, entitled Study on the Future Role and Development of Public Administration: the Results of a

Survey of Young People. As part of the study, full-time students from the programme Entrepreneurship and Business Management were also surveyed, and the data collected revealed that the students mostly associated their future with starting up a private business (47% of the respondents of LLU planned to start up their own businesses), compared with 28% for all the respondents of Latvian universities, and fewer students associated their future with work in the private sector as paid employees: only 15% of the respondents of LLU wanted to seek a career in the private sector as paid employees.

However, a **unique advantage** of the programme is one of its specialisations – <u>Rural Tourism Management</u>. This specialisation is consistent with three out of seven priorities set by the Sustainable Development Strategy of Latvia until 2030: (1) development of the cultural space, (2) nature as future capital and, in particular, the country's priority, (3) spatial development prospects, as well as with the specialisation set by the LLU Development Strategy – sustainable use of natural resources and improvement of the quality of life of the society.

The development of such a specialisation was based on 1) the need to develop the transfer of science and research to studies (a number of scientific research projects on rural tourism, use of the environment and regional development are carried out by the Faculty of Economics and Social Development (ESAF)); 2) examining the supply of education services and highlighting our unique advantages that provided an opportunity for implementing this specialisation. The examination resulted in the development of eight new field professional specialisation courses with a total workload of 23 CP (see the study plan).

A comparison with foreign programmes (Vilnius University, Lithuania; Tilburg University, the Netherlands) allows concluding that the workloads of the programmes in terms of credit points are quite similar, and only the specialisations and the proportions of elective courses differ. The specialisation Business Management of Vilnius University's programme Management mostly focuses on developing higher- and medium-level managers and administrators for business organisations or national institutions for the domestic and/or international markets. Tilburg University's bachelor programme Business Management integrates knowledge from three academic fields of social sciences: human resource studies, organisational studies and sociology from the intercultural and international comparison perspective.

In Latvia, a professional master programme **Business Management** is delivered by several universities and also several government-funded and private higher education institutions. Analysing the programme's **competitive advantages and uniqueness** allows concluding that 1) in their programmes, some higher education institutions offer a narrow specialisation in finance, logistics, real property management, administration processes and public administration; 2) the LLU programme is based on generally accepted practices regarding a classical business management programme, with an emphasis on resource management and the management of businesses from various industries of the economy, with a particular emphasis on life sciences and the bioeconomy and regional aspects; 3) the programme extensively offers to incorporate knowledge and skills into specific competences in interaction with other fields of LLU – bioscience and engineering. The programme is also delivered in English.

Comparisons with foreign universities: comparing the programme with a programme of the same name implemented by a university focused on excellence and also interdisciplinarity – the Polytechnic University of Valencia (Universitad Politècnica de València (UPV)) that is currently ranked 336th among world universities – allows concluding that the structures of the programmes are similar, yet more elective courses are offered at UPV (24 CP, compared with 4 CP at LLU) with the aim of mastering skills in the following specialisations: marketing, banking and finance, administration processes and e-business. The comparison allows finding that UPV is a larger

university (18 000 students), which also provides an opportunity to provide a larger variety of specialisations, which, in our case, would not be profitable. Consequently, our programme does not have specialisations that would compete with other programmes and specialisations offered by ESAF. A comparison with a programme implemented by Wittenborg University of Applied Sciences that is a university of a similar nature, according to its vision and mission, and is the fourth best university in the Netherlands in the category of small universities, allows concluding that the programme Master of Business Administration is almost completely consistent with our programme. The difference lies in the fact that audience classes are scheduled in modules and face-to-face studies take place during examination periods. A comparison with a programme implemented by the University of St. Thomas, Minnesota, allows concluding that an emphasis is placed on a personalised plan, as each student chooses a certain number of credits and makes a programme in line with their own interests and learning strategies. The programme focuses more on skill mastering through case studies, simulations, practical exercises and work placement, and there is close cooperation with the network of alumni and potential employers. Teaching personnel mostly represent advisers to students rather than knowledge givers. Students have an opportunity to learn - at an ethics laboratory, a leadership development laboratory, hackathons and a strategy development laboratory.

A competitive advantage of the professional master programme **Project Management** is based on the growing demand for project management professionals by enterprises in the public, private and nongovernmental sectors as well as the increasing number of international projects implemented and a quite high proportion of such projects in the public and private sectors. Consequently, there is a high demand for programmes preparing high-quality project managers, project evaluators with knowledge of and skills in the economy, the regional economy, the environmental economy and the circular economy.

A comparison of the programme with similar programmes in other public and private universities in Latvia highlights the **uniqueness** contained in the programme, which is based on the following considerations: 1) along with project management, the LLU programme offers specialisations in bioeconomics and regional development; 2) not all the programmes delivered in Latvia offer to learn social research methods, and students view it as an advantage of the LLU programme; 3) students gain more insight into the social, economic and legal environments, in which project management is done, and are therefore better prepared to manage projects in various industries of the national economy and enterprises.

Similar conclusions arise from an analysis of the opportunities for studying project management offered elsewhere in Europe:

- Vilnius University delivers the master programme International Project Management that is 1.5-year long, earning the qualification of a company manager. The curricula of both programmes, in terms of project management standards, are similar, yet the Lithuanian programme does not involve practical training. Both programmes focus on research and scientific work. Vilnius University's programme mostly focuses on international project management, whereas the focus of LLU's programme is placed on project management at the national and regional levels;
- The Norwegian University of Life Sciences delivers a two-year master programme, with a total workload of 120 ECTS. This programme is strongly oriented towards engineering project management and includes relevant theoretical courses and independent development of a project.

The joint master programme **Agri-food Business Management** of the leading universities of the three Baltic States (LLU, the Estonian University of Life Sciences (EMU) and Vytautas Magnus

University (VMU)) is a **unique programme** having no analogues either in Latvia or in the Baltic States; therefore, a comparison was made with the programmes delivered by three different EU higher education institutions in the Netherlands, Germany and France. These three specific programmes have been selected according to the field of study (management science) and the specifics of the industries (agriculture, food production).

Of the programmes selected for comparison, one is a joint programme (Sustainable International Agriculture), with a specialisation in International Agribusiness and Rural Development Economics, that is delivered by the Georg-August University of Göttingen and the University of Kassel−Witzenhausen in Germany, and one is a double diploma programme (Food and Agribusiness Management) that is implemented by Audencia Business School in France and the Superior School of Advertising and Marketing in Brazil.

The comparison of the programmes reveals some differences in terms of length, workload (ECTS) and curriculum content. The international master programme Agribusiness Development delivered by Aeres University of Applied Sciences is the shortest one (12 months), with a workload of only 60 ECTS, which could be explained by the fact that the individuals wishing to be enrolled on this programme must have work experience built up in industry enterprises or completed four-year long education. The length of the double diploma programme Food and Agribusiness Management is 14 months. The learning process is organised in more than one country – it occurs both in France and in Brazil. A significant part of the programme is practical training – the master students take 4-6 month work placements in France or Brazil. The joint programme Sustainable International Agriculture delivered by the Georg-August University of Göttingen and the University of Kassel−Witzenhausen in Germany is equivalent to the programme Agri-food Business Management in terms of workload (120 ECTS), learning process organisation and length (two years). The courses contained in both programmes are quite similar and focus on entrepreneurship, marketing, financial management and other resource management as well as the specifics of the industry: the agricultural market, agricultural policies, supply chains and food quality.

 The comparison of the three above-mentioned master programmes reveals that the joint master programme Agri-food Business Management of LLU, EMU and VMU is **unique**, as it is implemented by three universities of the Baltic States, and no similar programmes are currently available. In addition, a **competitive advantage** of this programme among related ones has to be stressed – it ensures different study and cultural experience and, at the same time, creates the sense of safety and comfort in students owing to geographical proximity, as moving from one university to another every semester is not burdensome in terms of time spent and costs incurred.

1.2. Aims of the study direction and their compliance with the scope of activities of the higher education institution/ college, the strategic development directions, as well as the needs and the development trends of the society and the national economy.

The higher education field of study Governance, Administration and Real Property Management (hereinafter – the field of study) was developed in accordance with the Constitution of LLU (https://www.llu.lv/sites/default/files/2018-03/LLU_Satversme_2018.pdf) that stipulates that the main goal of LLU is provide students with higher academic and professional education, develop internationally recognised research capabilities in sustainable use of natural resources aimed at improving the quality of life of the society, nurture culture as well as maintain and build up the intellectual potential of Latvia. The objectives of LLU are to prepare academically educated

specialists in agriculture, veterinary medicine, forestry and woodworking, food, landscape architecture, **social sciences** and engineering and other fields for the national economy, research, culture, education and public administration, giving a new knowledge and the skills to use it in the interest of the public, do scientific research and publish university proceedings, as well as organise further education and retraining for specialists.

LLU, in accordance with Decision No. 211 of 26/06/2013 and Accreditation Certificate No. 206 issued by the Accreditation Commission of the Ministry of Education and Science of the Republic of Latvia, has the right to implement the programmes contained in the field of study Governance, Administration and Real Property Management.

The programmes contained in the field of study are delivered in accordance with the LLU Development Strategy 2015-2020 (https://www.llu.lv/sites/default/files/2019-06/Startegy.pdf). The development of the field of study is subordinated to the vision of LLU: Latvia University of Life Sciences and Technologies is one of the leading universities in the field of science and technology in the Baltic Sea region, specialising in the sustainable use of natural resources for the improvement of the quality of life of the society. The field of study fully reflects the education goal set by the LLU Strategy – the long-term education goal of LLU is to deliver high-quality university studies that ensure preparing internationally competitive specialists. With regard to social sciences, the LLU Research Strategy attributes the main research activities to the economy, business and entrepreneurship (particularly agricultural and regional economics), sociology, landscape architecture, pedagogy and land management.

Based on the integration of university studies and research aimed at identifying opportunities for the efficiency of production processes, the expansion of enterprises, the sustainable development of bioresource industries, economic growth, the sustainable development of territories, the further expansion of internationalisation of university studies and lifelong learning as well as the alignment of objectives and interests of the stakeholders involved in the learning process, the **aim of the field of study is** to *ensure preparing internationally competitive, high-professional-level management specialists for the fields of commerce, business, entrepreneurship, project management as well as agricultural and food business management*.

In the context of the LLU Strategy, management specialists become innovation introducers in enterprises not only in Zemgale region but also throughout Latvia. Since the specialisation of LLU is associated with research on the bioeconomy, the implementation of management programmes includes a bioeconomy aspect.

The interaction of this field of study with the other fields of study delivered at LLU allows applying an interdisciplinary approach to researching and practically solving modern problems in the national economy in a complex way, which is not possible without the contribution of modern management science to situation analyses, making decisions and implementing the decisions.

The field of study focuses on preparing specialists who are able to adapt to changing labour market conditions, apply both standard management methods and perform specific tasks in the field of management. Acquiring the knowledge the field of study provides is associated with the relevant common strategies of the EU and the national objectives aimed at implementing the EU strategies, i.e. the matters pertaining to the bioeconomy and sustainable regional development and governance. The programmes of the field of study are designed in accordance with the National Development Plan of Latvia 2020 that envisages economic growth and decreasing regional disparities.

1.3. SWOT analysis of the study direction 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 direction 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 direction for the next assessment period shall be provided.

In general, the field of study and the accredited programmes of the field of study are viewed in the context of the overall social, economic and political situation in Latvia. The development of the field of study is determined by socio-economic trends, national policies made in specific fields, labour market forecasts, as well as an assessment of the field of study and its programmes, which is concisely presented in the SWOT analysis (see Table 2.2).

The SWOT analysis allows drawing the following key conclusions:

- the field of study has a number of competitive advantages in relation to both the curricula of the programmes and the implementation of the programmes. The programmes focus on strengthening the uniqueness and unique areas of LLU: developing management-based skills and competences;
- most of the weaknesses relate to the problems concerning funds, including acquiring the funds, as well as to the factors affecting the overall capacity of the programme;
- opportunities for the field of study could be viewed in the context of threats and weaknesses, which also constrain and limit the quantitative development of the field of study and its programmes and, for example, opportunities for cooperation, mobility and an increase in the number of government-funded study places;
- most of the threats relate to available funds (government funding and funds from tuition), yet there are also threats relating to opportunities for attracting teaching personnel and the external factors affecting the practical implementation of the programmes.

Table 2.2

Analysis of the strengths, weaknesses, opportunities and threats for the field of study

Strengths	Weaknesses
- Persistent enhancement of the field of study and its programmes in view of labour market trends as well as recommendations of employers and students - Examination of foreign university experience for the purpose of enhancing the courses of the programmes - Succession and diversity of the programmes contained in the field of study at the level of master studies - Application of modern teaching methods in delivering the programmes (e-studies, modules, interdisciplinarity, study trips, visiting lecturers – industry professionals, summer schools, the Alumni Club) - Persistent enhancement of the infrastructure and informational and material resources needed for delivering the programmes - Shared use of LLU resources, which contributes to resource use efficiency - Involvement of foreign university teaching personnel in delivering courses - Growing number of foreign students, which contributes to the internationalisation of the learning environment - Joint international (LV, LT, EE) master programme Agri-food Business Management has been developed and implemented - Professional master programme Business Management is delivered to foreign students in English - ERASMUS+ mobility for students and teaching personnel - Experienced and professional academic personnel that allows applying an individual approach to every student - Academic personnel's research activity, regular participation in scientific conferences and research projects ensures the link among education, research and entrepreneurship - International scientific conferences for bachelor and master students are held - Government-funded study places are available to students - Regular assessment of the programmes by involving students and professionals and persistent enhancement of methodological resources for courses	- Small number of foreign visiting lecturers in the main job due to uncompetitive remuneration - Medium high drop-out rate, especially among first-year students - Limited opportunities to involve students in scientific research owing to insufficient funding for science - Insufficient exchange of students with foreign universities - Insufficient number of support personnel to perform administrative functions for the field of study
Opportunities	Threats
- Dominance of the services sector in the national economy creates a high demand for qualified specialists in public, private and nongovernmental sector organisations in the regions of Latvia - Development of international programmes allows attracting foreign students and foreign visiting lecturers - Internationalisation of the curricula of programmes - Build-up of foreign language skills by teaching personnel and the delivery of courses in foreign languages - Promotion and expansion of international mobility of students and teaching personnel to foreign universities - Strengthening the link between education and scientific research - Promotion of teaching personnel and student participation in international scientific research projects - Promotion of further education among teaching personnel (doctoral studies, various courses, exchange trips, participation in projects) - Persistent enhancement of the learning process	- Limited opportunities for social science organisations to acquire EU funding for enhancing the infrastructure for university studies - Diverse levels of preparedness of students in the context of theoretical knowledge, foreign language skills and other skills - Stronger competition in delivering analogous programmes among universities in Latvia - Demographic situation in Latvia reduces the number of potential students - Insufficient government funding - Decrease in the number of students due to economic factors - Students engage in the labour market along with their studies, which hinders them from fully dedicating themselves to and completing their studies - Remuneration and academic workload system creates a threat to attracting and retaining the academic personnel - Long and bureaucratic admission process for foreign students

To assess its strengths, weaknesses, opportunities and threats, the university has developed and adopted the LLU Development Strategy, which outlines the main activities to achieve the goals set. Taking into account the results to be achieved by the university, the Faculties design their action enhancement plans that serve as guidelines for programme directors to make furthers decisions regarding the fields of study. Faculty action plans contain the following components and relevant assessments: research performance; educational performance; administration enhancement; others.

Faculty action plans, including the fields of study and the programmes contained therein, are reviewed and approved by the Board of the Faculty. The dean of the Faculty reports on the implementation of an action plan, an analysis of the strengths and weaknesses, as well as the opportunities and threats at an LLU administration meeting. The reports of the Faculties are summarised and available to all LLU teaching personnel and students (via the intranet Mans LLU).

Action plans are incorporated in a joint report on the implementation of the LLU Development Strategy that is presented by the LLU rector to the LLU Council.

The operational plans of the Faculty and details on their implementation in accordance with the LLU Development Strategy 2015-2020 are available at an in-person visit.

1.4. The structure of the management of the study direction and the relevant study programmes, and the analysis and assessment of the efficiency thereof, including the assessment of the role of the director of the study direction 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 direction.

Administrative personnel for the field of study are as follows: the dean, vice-deans, programme directors and ESAF institute directors. Support personnel are also involved – ESAF institute secretaries (3) control office workflow, keep student files, keep faculty documentation, inform students and manage and account for internal and external documentation.

The field of study is implemented at the LLU **Faculty of Economics and Social Development** (ESAF), which is fully in accordance with the goal defined by its Statute. The goal of ESAF is to provide students with academic and professional education and to do scientific research in the fields of economics, philosophy, sociology and management science. All the ESAF institutes are engaged in implementing the field of study: the Institute of Business and Management Science, the Institute of Economics and Regional Development, the Institute of Finance and Accounting and the Institute of Social and Human Sciences. The other faculties of LLU (Faculty of Information Technologies; Faculty of Environment and Civil Engineering; Faculty of Food Technology; Faculty of Engineering; Faculty of Agriculture; Forest Faculty), centres (Language Centre; Lifelong Education Centre; Sports Centre), research institutes (Institute of Agricultural Resources and Economics) and the research and training farm Vecauce are also involved in implementing the field of study.

The field of study is consistent with the structure of LLU, and the institution responsible for implementing the field of study and programmes contained therein is the Faculty of Economics and Social Development (see Annex 4).

A **programme director is responsible** for implementing the programme in accordance with the Statute on Programme Directors (LLU Senate Decision No. 9–81 of 12 April 2017). A programme

director is approved by the LLU Senate on the basis of the decision of the Council for Studies. The main responsibilities of a programme director are to:

- organise the development of a programme on the basis of the decision of the Board of the Faculty on the creation of a new programme and the decision of the LLU Senate Regulations regarding the Development, Approval and Change of Programmes at LLU;
- prepare information for an annual self-evaluation report;
- organise and ensure the development of syllabuses of courses according to the requirements;
- coordinate the development of courses, ensuring the succession and compatibility of courses;
- submit a study plan, as well as the syllabuses of courses, practice and other programme components to the Faculty's Methodology Commission for assessment;
- cooperate with the Faculty's dean and department/institute/centre heads/directors, teaching personnel and students in order to enhance the programme;
- regularly inform students about current developments, activities and requirements for studies;
- organise surveys of alumni, employers and students and analyse the results of the surveys as well as propose elimination of the shortcomings identified;
- follow the evaluations of the teaching personnel involved in the programme in the LLU Information System (LLU IS) and analyse the results;
- cooperate with the LLU Centre for Studies and the LLU Communication and Marketing Centre to promote the programme.

The rights of a programme director: to propose changes to the programme by informing the head/director of the relevant department/institute/centre/dean; to request information related to the programme from LLU organisational units; to make proposals for drawing up LLU internal regulatory documents and enhancing the current ones.

Programme directors and responsible departments and/or institutes are involved in the work of the Methodology Commission, thereby establishing cooperation aimed at interconnecting the programmes and practically implementing the programmes (Statute of the Methodology Commission, LLU Senate Decision No. 6-107 of 9 April 2008). Members of the Methodology Commission are approved by the Board of the Faculty. The key functions of the Methodology Commission are as follows: examining and approving programme plans in accordance with the applicable legal acts of the Republic of Latvia and LLU internal regulatory documents; reviewing and assessing new courses and plans; evaluating programme licensing, accreditation and self-assessment reports; reviewing and coordinating study plans; reviewing and evaluating the programme, its curriculum in accordance with to the guidelines for the programme/specialisation. A Methodology Commission is established for each level of studies (bachelor and master).

The field of study is administered in accordance with the external regulatory framework and the LLU Quality Management System Assurance Plan, which form a single **system for effective process management and supervision**. All the stakeholders are involved in the management of the field of study: students, alumni, personnel, other educational institutions (secondary, secondary professional and higher) both in Latvia and in the Baltic States, research institutes and other organizations related to research, employers, industry experts and organizations and the State.

1.5. 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 the study period, professional experience, and the

options for the students to have their previously acquired formal and non-formal education recognised within the study direction by providing specific examples of the application of these procedures.

Admission at LLU is held in accordance with the Constitution of LLU, the Law on Higher Education Institutions, Cabinet regulation No. 846 of 10 October 2006 Regulations regarding Requirements, Criteria and Procedure for Enrolment on Study Programmes, the vice-rector for studies ordinance On the Procedure of Admission to LLU, the Senate decision Regulations regarding Enrolment on Bachelor Studies at LLU, the Senate decision Regulations regarding Enrolment on Master Studies at LLU and the vice-rector for studies ordinance On the Rights and Obligations of Applicants and LLU during Admission.

The regulations regarding enrolment on any LLU programme are approved by the LLU Senate every year in October and available on the LLU website. For website visitors, the regulations in Latvian are available at https://www.llu.lv/lv/uznemsana, while in English at https://www.llu.lv/en/degree-programmes. Applicants are admitted on a competitive basis according to the criteria set by the regulations. The admission is carried out by the LLU Admission Commission and the Admission Commissions of the Faculties in accordance with the vice-rector for studies ordinance On the Procedure of Admission to LLU.

The following mandatory requirements are set for enrolment on bachelor programmes: **general secondary education or secondary vocational education**. Applicants are admitted on a competitive basis according to the results of centralized exams in Latvian, foreign languages (English, German, French or Russian) and mathematics. Applicants who meet the minimum requirements and who are the winners of first three places/prizes in international and national contests approved by the Ministry of Education and Science and in national school student research contests in the courses and science branches set by the Faculties are admitted automatically.

Applicants could apply for admission by using e-services (on the portal www.latvija.lv) and the unified admission system, where the applicants' applications are processed simultaneously for 12 higher education institutions of Latvia (Latvia University of Life Sciences and Technologies, University of Latvia, Riga Technical University, Daugavpils University, Liepaja University, Vidzeme University of Applied Sciences, Rezekne Academy of Technologies, Ventspils University College, BA School of Business and Finance, EKA University of Applied Sciences, RISEBA University of Business, Arts and Technology and ISMA). The unified admission system provides a number of advantages: 1) higher education institutions can identify the interest of potential applicants for their programmes; 2) applicants can apply for studies at a university being close to their places of residence and remotely follow the opportunities to study in the chosen programme, as well as receive the competition results immediately. However, the unified admission system has also some disadvantages: 1) applicants may choose several programmes and often the number of applications does not reflect the actual number of applicants; 2) no possibility to get feedback on the choice made and any change made in the choice; 3) some applicants do not have a clear principle of prioritization of the programmes they apply for.

A description of the admission process for foreign applicants is available at https://www.llu.lv/en/how-to-apply, and the Regulations regarding Enrolment on Programmes Delivered in English approved by the LLU Senate apply to the admission. The regulations stipulate that: 1) admission of foreigners to LLU is held in accordance with Section 83 of the Law on Higher Education Institutions; 2) admission of foreigners to LLU is organised by the International Cooperation Centre (ICC) in cooperation with the Centre for Studies (CS) and the Language Centre.

Foreigners matriculate at LLU if meeting the following requirements: 1) the level of education acquired and the final marks earned comply with the general admission requirements set by LLU; 2) in accordance with Section 85 of the Law on Higher Education Institutions, the applicant has received a certificate from the Academic Information Centre (AIC) regarding the academic recognition of educational documents in Latvia; 3) the applicant has met the admission requirements of the programme concerned; 4) the applicant has met the requirements for entry and stay in Latvia; 5) the applicant has paid the tuition fee for the first academic year. The admission process is finished by the ICC by creating a personal document file of the applicant and submitting it to the CS.

The following mandatory requirements are set for enrolment on master programmes: **a bachelor degree or higher vocational education with the right to enrol on master studies**. The admission is held on a competitive basis, based on the average weighted mark earned at the previous level of studies. LLU graduates may apply for master studies electronically, using the LLU Information System, while graduates of other higher education institutions have to do in person.

Applicants may also commence their studies in the programmes of the field of study **at later stages** if they have previously acquired knowledge, skills and competences in formal education or in non-formal education. The commencement of studies at later stages is stipulated by: the Law on Higher Education Institutions, Cabinet Regulation No. 932 of 16 November 2004 Procedure for Commencing University Studies at Later Stages, the LLU rector ordinance On Commencing Studies at Later Stages at LLU, and the relevant information is available at: http://www.llu.lv/lv/pariesana-no-citas-augstskolas ; http://www.llu.lv/lv/atjaunosanas-studijam.

In the reporting period (academic years: 2013/2014 – 2018/2019), 85 individuals commenced their studies in the programme Entrepreneurship and Business Management at later stages. More than half of the total number of students enrolled at later stages commenced their studies after completing a first-level higher education programme. Both graduates of our first-level programme Business Studies as well as graduates of other universities and colleges matriculate to the programme.

The **recognition of learning outcomes achieved through previous education or professional experience** is based on the Law on Higher Education Institutions, Cabinet regulation No. 36 of 10 January 2012 Regulations regarding the Recognition of Learning Outcomes Achieved through Previous Education or Professional Experience, the vice-rector for studies ordinance On the Assessment and Recognition of Learning Outcomes Achieved through Previous Education or Professional Experience at LLU, the Statute on the Recognition of Learning Outcomes Achieved through Previous Education or Professional Experience approved by the LLU Senate. The relevant information is available at: http://www.mc.llu.lv/index.php/2016-03-22-07-50-03/pieredzes-atzisana. For example, this opportunity was used by one student, and her 16 CP were transferred.

1.6. 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.

The following complex indicators are selected as the most important common criteria, which shape the programmes contained in the field of study, the field of study and the strategy of ESAF, for assessment of students' achievements: student satisfaction level, employer references, graduate

competitiveness in the labour market (application of knowledge, skills and competence in practice), accreditations – national and international –, graduation/admission ratio, financial performance, etc.

The key principles and procedure of assessment of students' knowledge are prescribed by the Regulations regarding the Academic Education National Standard (Cabinet Regulation No. 240 of 13 May 2014) and the Regulations regarding the Second-level Higher Vocational Education Standard (Cabinet Regulation No. 512 of 26 August 2014) as well as LLU internal regulatory documents.

The achievements of students are assessed based on the following principles:

- transparency of assessment – a set of requirements for assessment of learning outcomes according to the goals and objectives of programmes, as well as the goals and objectives of courses. The quality of students' knowledge is assessed both **qualitatively** – (tests are marked on a 10-point marking scale, some tests – with pass or fail) and **quantitatively** – with credit points (CP) (contact hours and independent work). The number of credit points to be obtained is specified in the study plan;
- compulsory assessment – it is required to earn a passing mark for the entire curriculum of the programme;
- an opportunity for reassessment of learning outcomes – LLU has adopted a procedure for reassessing the learning outcomes;
- diversity of kinds of assessment – various kinds of assessment are used to assess the learning outcomes of students.

Criteria, requirements and procedures for assessment of learning outcomes of LLU students are described in the **Statute on Studies at LLU**, which are available in Latvian at https://www.llu.lv/lv/studiju-un-reglamentejosie-dokumenti and in English at https://www.llu.lv/en/study-guide-documents.

The syllabus of a course (see Annex 19, course descriptions) is designed by the responsible teaching personnel member according to the programme's map and goal as well as learning outcomes – knowledge, skills and competences. In the syllabus of a course, the teaching personnel member defines the expected learning outcomes – *knowledge, skills and competences* – as well as the *way they are achieved* and the *ways of learning*. The syllabus of a course states: test and examination methods; assessment criteria and methods as well as criteria for awarding marks; the syllabus is available on Moodle and the lecturer, upon starting delivering the course, familiarises the students with it; student assessment is based on the principle of summing up positive performance, which allows the students to demonstrate the extent to which they have achieved the learning outcomes.

The principles of assessment of a graduate thesis are stipulated by the Regulations regarding Final Examinations passed by the Senate (http://www.llu.lv/lv/studiju-nosleguma-parbaudijumi-un-saistibas) and the subordinated ordinances of the rector and the vice-rector for studies. The documents, among them the ESAF Guidelines for Writing and Defending a Graduate Thesis (2018), the LLU rector ordinance (No. 4.3.-8/72 of 4 October 2017) On Violations of Academic Integrity in Graduate Theses, contain anything needed for assessing the graduate theses quantitatively and qualitatively. The overall mark, on a 10-point marking scale, is comprised of a mark for the graduate thesis, the review(s) and the marks given by the Thesis Defence Committee during the defence of the graduate thesis.

The **assessment of students' performance during practice** is based on the LLU Traineeship Regulation approved by the Senate and the vice-rector for studies ordinance On the Preparation of Decisions on Work Placements in the LLU Information System; the assessment is done in line with the goal and objectives of students' practice and the individual objective set for the student's

practice. The assessment of students' performance during practice is based on: a practice report, a reference of the work placement supervisor and the presentation of the report. The student's performance during practice is assessed on a 10-point marking scale or on a pass/fail basis. The assessment is done by a Traineeship Defence Committee, taking into account the report, the defence results and the work placement supervisor's reference.

The above-mentioned procedure, criteria and principles for assessing the achievements of students contribute to achieving the goals of the programmes and to student-focused learning.

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

Academic integrity, which involves various parties, implies performing academic work at the highest standards of professionalism and accuracy, objectivity and truthfulness, moral and ethical principles, integrity, including the prevention of plagiarism, sincere reporting and accuracy in academic research papers, communications and publicity events, which form the image of the academic environment.

The academic integrity of LLU is **aimed at:**

- practising a high academic and scientific culture,
- promoting public confidence in the quality of education and the results of scientific research,
- preventing and avoiding violations of the principles of academic integrity,
- imposing liability for unfair and unauthorized behaviour.

Students and the academic, general, scientific and administrative personnel of LLU are equally responsible for complying with the principles of academic integrity and for the consequences of violating academic integrity. LLU has developed and introduced certain procedures for the examination of plagiarism in graduate theses and actions if it is found:

- LLU rector ordinance Procedure for Submitting Electronic Copies of Graduate Theses and their Examination in the Plagiarism Control System;
- LLU rector ordinance Violations of Academic Integrity in Graduate Theses and Doctoral Dissertations.

In 2014, LLU concluded an agreement on the use of an inter-university unified computerized plagiarism control system (hereinafter – the System) and started examining all graduate theses on plagiarism in both bachelor and master programmes. In the 2017/2018 academic year, LLU decided that a compulsory examination of doctoral theses for plagiarism would be performed as well.

The plagiarism procedure stipulates that if in a graduate thesis the System finds 10% of the text to coincide with another thesis, the LLU graduate thesis has to be reviewed by a committee established by the Faculties that decides on the presence or absence of plagiarism after having first received explanations from the author and the supervisor. Since the introduction of the unified computerized plagiarism control system, the LLU has totally found 124 suspicious theses. Interviews were conducted with all the authors of the theses, 18 students were prohibited from taking the final examination and exmatriculated, of which two students were exmatriculated in the academic year 2018/2019.

In the period 2014-2019, 399 theses in the field of study Governance, Administration and Real Property Management have been tested for plagiarism. Of them, five have been recognized as plagiarism. All the plagiarism instances were found in the bachelor theses of part-time students, one in each year.

In view of the plagiarism control results, Plagiarism Assessment Committees were established in accordance with an ordinance of the dean. They included the programme director, the supervisor, the director of the institute, a representative of the Faculty administration, and the head of the Methodology Commission. Students were also invited to the meetings of the Committee, and written explanations were received on the situation. The Committees found that the theses had plagiarism in both the theoretical part and the research part. Students were expelled from LLU for failing to comply with academic integrity. In accordance with the LLU procedure, the student may re-write his/her graduate thesis not earlier than after one year, and the research has to be done on another topic.

1.8. Specify the websites (e.g. the homepage) on which the information on the study direction 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.

Information on the fields of study and the programmes contained therein is published on the website of LLU at: **www.llu.lv**, including on current developments in the relevant programmes, as well as basic information about each programme. Detailed information (descriptions of the programmes) is available in the section *Studijas / Studiju programmas* -> https://www.llu.lv/lv/studiju-programmas and in the section *Nāc studēt / Ko studēt? Palīgs studiju programmu izvēlē* -> https://www.llu.lv/lv/studiju-programmas.

Information in **English** on the programmes is available on the LLU website: *Studies / Degree Studies / Degree Programmes* -> https://www.llu.lv/en/degree-programmes.

The descriptions of all the programmes are available on the website of LLU ESAF at: http://www.esaf.llu.lv/: *Studijas / Studiju iespējas* **->** http://www.esaf.llu.lv/lv/studiju-iespejas.

Information about the programmes is also available in **electronic informative materials** (booklets), incl. information on each particular programme and graduate feedback:

- booklet for bachelor programmes at: https://www.llu.lv/sites/default/files/2019-02/LLU-pamatstudiju-buklets-2019-WEB.pdf;
- booklet for master programmes at: : https://www.llu.lv/sites/default/files/2019-03/LLU-Magistra-studijas-2019-web_0.pdf;

The **organisational units responsible** for the consistency of the information available on the LLU website with the information available in the official registers are as follows:

- Centre for Studies – bachelor, master and doctoral programmes delivered in Latvian;
- International Cooperation Centre on programmes delivered in English.

Information on the LLU website is prepared in cooperation with the director of each programme.

Information on LLU programmes is also available on the portal **www.prakse.lv:**

https://www.prakse.lv/edu/profile/84/latvijas-lauksaimniecibas-universitate; the responsible person is a project manager of the Lifelong Education Centre.

Information on LLU programmes is also available in the **Database for National Education Opportunities** at: www.niid.lv: http://niid.lv/niid_search?qy=Latvijas%20Lauksaimniec%C4%ABbas%20universit%C4%81te&level_1=7

Information available for **foreign students**.

The LLU website provides comprehensive and detailed information for potential and current full-time students from abroad on:

- LLU programmes delivered in English at: http://www.llu.lv/en/degree-programmes, and a description of each programme gives details even about the study plan, e.g. at: https://www.llu.lv/sites/default/files/2016-10/MBA_LLU%281%29.pdf;
- admission requirements at: http://www.llu.lv/en/how-to-apply;
- immigration procedures at: http://www.llu.lv/index.php/en/immigration;
- conditions for studies and living at: http://www.llu.lv/sites/default/files/2018-11/LLU-Celvedis-EN-2018-17.10.pdf; http://www.llu.lv/index.php/en/before-arrival ; http://www.llu.lv/index.php/en/about-university-0;
- foreign student testimonials at: http://www.llu.lv/en/student-testimonials-7.

The LLU website provides information on academic mobility eligibility criteria and procedures in accordance with the Erasmus+ University Charter and the programme guidelines:

- in Latvian at: https://www.llu.lv/lv/starptautiska-mobilitate;
- in English at: https://www.llu.lv/en/exchange-studies.

LLU subscribes the following e-marketing websites:

- https://www.masterstudies.com/universities/Latvia/LLU/;
- https://www.educations.com/search/jelgava.

Responsibility for the consistency of the content available on the websites or changes therein with official information lies with the programme director or the external relations coordinator of the Faculty, while the external communication coordinators of the LLU International Cooperation Centre (ICC) are responsible for placing the information on the websites.

The LLU ICC has produced and published informative booklets: the Erasmus+ Mobility Information Handbook and Degree Studies, leaflets and other materials that are used for advertising the programmes and international student exchange at marketing events.

II - Description of the Study Direction (2. Efficiency of the Internal Quality Assurance System)

2.1. Assessment of the efficiency of the internal quality assurance system within the study direction 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 direction and the relevant study programmes.

The **internal quality assurance system** represents a continuous cyclic process aimed at persistently improving and developing the study field and the programmes contained therein. The internal quality assurance system is based on E.Deming's cycle (plan-do-check-act).

In order to ensure fact(data)-based decision making ("plan" stage), as well as to assess the effectiveness of improvement and enhancement measures or the internal quality assurance system ("check" stage), there have to be individuals responsible for collecting data, targets have to be set and there have to be individuals responsible for achieving the targets.

The indicators showing the effectiveness of an internal quality assurance system are classified into three categories:

- indicators of quality of studies;
- indicators of qualifications and work quality of teaching personnel;
- indicators of the environment for studies.

Targets or expected performance are set for admission and forecasts for LLU in the ESAF Operational Plan for implementing the LLU Development Strategy 2015-2020 and in the LLU Development Strategy 2015-2020 (https://www.llu.lv/sites/default/files/2019-06/Startegy.pdf).

The internal quality assurance system and its performance indicators are summarized in Table 2.3.

Table 2.3

Indicators showing the performance of the internal quality assurance system

Indicator	Data collection frequency	Data collection mechanism
Indicators of quality of studies		
Number of matriculated first-year students	Once a year before 1 October	The data collected by the LLU Centre for Studies are sent to the dean of ESAF and programme directors for preparation of annual self-assessment reports and execution of the ESAF Operational Plan as well as for analysis of the data
Applicant to place ratio	Once a year before 1 September	The data collected by the Admission Committee are sent to the dean and discussed at an ESAF Board meeting
Number of students in a programme	Once a month	The data collected by the LLU Centre for Studies are sent to the dean of ESAF and the programme director for preparation of an annual self-assessment report and execution of the ESAF Operational Plan as well as for monthly analysis of the data
Number of occupied government-funded study places	Once a month	The data collected by the LLU Centre for Studies are sent to the administration of LLU and the deans and vice-deans of the Faculties

Number of drop-out students	Once a year before 1 October	The data collected by the LLU Centre for Studies are sent to the dean of ESAF and programme directors for preparation of annual self-assessment reports and execution of the ESAF Operational Plan as well as for analysis of the data
Number of matriculated students at later stages	Once a year before 1 September	The programme director collects the data for an annual self-assessment report
Student mobility	Once a year before 1 September	The data collected by the LLU International Cooperation Centre are sent to the dean of ESAF and programme directors for preparation of annual self-assessment reports and execution of the ESAF Operational Plan as well as for analysis of the data
Change in the number of students	Once a month	The data collected by the LLU Centre for Studies are sent to the programme director for analysis and identification of further actions
Graduation to admission ratio in a programme	Once a year	The programme director collects the data for an annual self-assessment report
Number of graduates	After defence of graduate thesis	The data collected by the LLU Centre for Studies are sent to the dean of ESAF and programme directors for preparation of annual self-assessment reports and execution of the ESAF Operational Plan as well as for analysis of the data
Average mark for graduate theses	After defence of graduate thesis	The Thesis Defence Committee collects the data for a report on the Committee's work
Number of graduate theses to be used in practice	After defence of graduate thesis	The Thesis Defence Committee collects the data for a report on the Committee's work
Number of best graduate theses	After defence of graduate thesis	The Thesis Defence Committee collects the data for a report on the Committee's work
Alumni employment	Once a year/ Once every five years / continuously	The LLU Centre for Studies and the programme director conduct a survey of alumni before the alumni gathering. The organisers (responsible organisational unit) of the Alumni Week collect relevant data
Quality of studies (student average rating on a 5-point scale)	Once a year	The LLU Centre for Studies collects the data for execution of the ESAF Operational Plan

Student satisfaction with a programme, student expectations	Once a year	The programme director conducts a survey of students
Alumni assessment of a programme	Once a year	The programme director conducts a survey of alumni
Employer assessment of a programme	Once a year	The programme director conducts a survey of employers
Number of proposals and complaints submitted	Every month	The responsible person collects the data and reports at a monthly Faculty Board meeting

Indicators of qualifications and work quality of teaching personnel

Conformity of the qualifications of teaching personnel with the requirements of the regulatory framework	Once a year	LLU Personnel Department
Teaching personnel to student ratio	Once a year	The programme director collects the data for an annual self-assessment report
Turnover of teaching personnel involved in delivering courses, cooperation among the teaching personnel to deliver the courses	Once a year	The programme director collects the data for an annual self-assessment report in cooperation with the heads of organisational units
Teaching personnel's participation in professional development courses, seminars etc.	Once a year	The heads of organisational units collect the data for an annual self-assessment report and for execution of the ESAF Operational Plan
Number of research papers produced by teaching personnel	Once a year	The heads of organisational units collect the data for execution of the ESAF Operational Plan and for an annual self-assessment report and a report Research Performance
Teaching personnel's participation in research projects	Once a year	The heads of organisational units collect the data for execution of the ESAF Operational Plan and for an annual self-assessment report and a report Research Performance
Teaching personnel's participation in mobility programmes	Once a year	The LLU International Cooperation Centre collects the data for an annual self-assessment report and for execution of the ESAF Operational Plan

Number of teaching aids produced by teaching personnel	Once a year	The heads of organisational units collect the data for an annual self-assessment report and for execution of the ESAF Operational Plan. A contest of teaching aids
Assessment of teaching personnel members	Twice a year	The LLU IS administrator, the heads of organisational units and the programme director
Cooperation between teaching personnel and students in research activities	Once a year	The programme director collects the data for an annual self-assessment report
Number of teaching personnel hospitated	Once a year	The heads of organisational units collect the data on hospitation
Number of the syllabuses of courses enhanced	Once a year	Programme directors collect the data for an annual self-assessment report in cooperation with the heads of organisational units
Teaching personnel's participation and representation of ESAF in public organisations, public activities and opinion-shaping events	Once a year	The heads of organisational units collect the data for an annual self-assessment report and for execution of the ESAF Operational Plan
Number of visiting lecturers from foreign universities	Once a year	The heads of organisational units collect the data for an annual self-assessment report and for execution of the ESAF Operational Plan
Number of visiting lecturers with whom LLU has concluded a contract for delivering a course	Once a year	The LLU Personnel Department collects the data for execution of the ESAF Operational Plan
Number of industry professionals involved in the learning process	Twice a year	The heads of organisational units collect the data for an annual self-assessment report and for execution of the ESAF Operational Plan

Indicators of the environment for studies

Numbers of books purchased and databases subscribed	Once a year	Programme directors collect the data for an annual self-assessment report in cooperation with the head of the LLU Library and the head of the ESAF Centre for Studies and Scientific Information
Material and technological resources	Once a year	Programme directors collect the data for an annual self-assessment report in cooperation with the heads of organisational units

The data collected are analysed, assessed and interpreted to:

- prepare an annual report and a self-assessment report on the field of study, which are reviewed by the ESAF Board, the LLU Council for Studies and approved by the LLU Senate;
- prepare a report on execution of the ESAF Operational Plan for implementing the LLU Development Strategy 2015-2020, which is reviewed by the ESAF Board, and afterwards the ESAF dean reports on the performance at an LLU Rector Office meeting. Based on the collected performance data on the Operational Plans of the Faculties, the LLU rector reports to the LLU Council on the results of implementation of the LLU Development Strategy 2015-2020;
- prepare reports of thesis defence committees, which are reviewed and approved by the ESAF Board;
- use the performance results to assess, review and enhance the field of study and the programmes contained therein;
- assess the effectiveness of the internal quality assurance system for the self-assessment report (see Section 3, characteristics of the relevant programme).

The field of study involves carrying out the following **quality assurance activities**:

- preparing an annual self-assessment report for the field of study (responsible: the Methodology Commission, programme directors);
- enhancing and developing the programmes (responsible: programme directors, the Methodology Commission, the ESAF Board);
- planning and controlling the implementation of the programmes (responsible: the LLU Centre for Studies, programme directors, heads of organisational units);
- enhancing and changing a study plan (responsible: programme directors, the Methodology Commission, the ESAF Board);
- enhancing the syllabuses of courses (responsible: teaching personnel, programme directors, the Methodology Commission, the ESAF Board);
- analysing the learning outcomes and attendance of students (responsible: programme directors);
- hospitation of teaching personnel (responsible: heads of organisational units, programme directors, teaching personnel);
- provision of material and technological resources (responsible: the dean);
- provision of methodologies and information for the learning process (responsible: LLU Library personnel, teaching personnel, the head of the ESAF Centre for Studies and Scientific Information).

At the end of every academic year, a survey of students, a survey of alumni and a survey of employers are conducted. The survey results are aggregated, discussed and used to enhance the field of study and its programmes and courses.

In accordance with the internal regulations of LLU (https://www.llu.lv/lv/ar-studijam-saistitie-dokumenti), the syllabuses of courses/practice are reviewed and enhanced at least once every two years as well as during preparing a self-assessment report.

Twice an academic year after graduate theses have been defended, the theses are analysed both at the institutes of ESAF that are responsible for delivering the programme, which discuss the theses defence results, and at the ESAF Board, which approves a report by the Thesis Defence Committee.

After the reports by the Thesis Defence Committees have been approved, the programme director reviews the guidelines for writing and formatting a thesis and, if necessary, amends the guidelines. Amendments to the guidelines are discussed at the institute responsible for implementing the

programme, the Methodology Commission and approved by the ESAF Board.

In order to improve the quality of the learning process, guest lectures are organised both within the ESAF Alumni Week and within specific courses. During the ESAF International Week, guest lecturers from LLU partner universities also deliver guest lectures. Study tours are also organised when students visit specialists and entrepreneurs of the relevant field.

Efforts are persistently made to attract new teaching personnel to the field of study. Doctoral and master students as well as alumni as professionals in the relevant field are also involved in it.

The quality of teaching personnel engaged in delivering courses in the field of study is also regularly assessed. At the end of each semester, a survey of students on the courses taken and the quality of work of the teaching personnel delivering the courses is conducted. The survey is conducted electronically in the LLU Information System. The survey results are summarised and available to the programme director and the heads of organisational units, while each teaching personnel member can see a rating of his/her performance. The survey results give teaching personnel an opportunity to analyse and enhance their work, while programme directors are given valuable recommendations on how to enhance the quality of the programmes. In addition, the administration of LLU and the heads of its organisational units use the information acquired to implement activities aimed at contributing to the quality of studies at university level. The survey results represent one of the key criteria in the teaching personnel motivation system. The questionnaire for surveys is regularly reviewed, and representatives of the LLU student self-government are involved in it.

In the academic year 2018/2019, LLU introduced hospitation, which is carried out by the programme director, the heads of LLU organisational units or other teaching personnel (LLU Council for Studies decision On the Procedure of Hospitation of Classes at LLU). The hospitation of classes is carried out at least once every six years, while the classes delivered by teaching personnel with 0-3-year service length are hospitated at least once a year. The classes of a teaching personnel member are hospitated no more than once or twice an academic year. In case of unsatisfactory student ratings, the hospitation of classes could be organised more frequently to ascertain whether the students' ratings are unbiased. The total results of class hospitation are examined once an academic year at meetings of LLU organisational units. The teaching personnel who had been given suggestions/recommendations for improvement of their classes in the hospitation form have to provide information about the way they have improved their classes.

The collections of the LLU Fundamental Library and the ESAF Centre for Studies and Scientific Information is persistently supplemented with the literature in Latvian and in English that has been suggested by teaching personnel. The teaching personnel themselves also write textbooks and monographs.

The administration of ESAF and other organisational units of LLU ensure the quality of material and technological resources meets the learning needs of students.

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 procedures for the development of new study programmes within the study direction (including the approval of study programmes), the review of the study programmes, the aims, and regularity, as well as the stakeholders and their responsibilities. Description of the mechanism for obtaining and providing a feedback, including with regard to the work with the students, graduates, and employers.

LLU has developed a programme implementation system, which consists of eleven system elements, including the procedure **Development, Approval and Licensing of a New Programme in an Accredited Field of Study**. This procedure consists of eleven successive, subordinate steps. A responsible person or institution is assigned to each procedural step at LLU. The main internal legal document governing this procedure is the Senate decision No. 10-5 of 13 March 2019 Regulations regarding the Development, Approval and Change of Programmes at LLU (available at: https://www.llu.lv/lv/ar-studijam-saistitie-dokumenti). The procedure stipulates that the ESAF Board makes a decision on the development of a new programme and appoints a potential programme director who directs the development of the programme's curriculum. The curriculum of the programme is reviewed by the ESAF Methodology Commission and the ESAF Board. An independent assessment and expert evaluation of the programme have be done before the programme's documents are discussed by the Council for Studies and approved by the LLU Senate.

The independent expert evaluation of the programme includes a justification of the usefulness of the programme, also indicating the most significant differences of the programme from similar programmes of the same level and the programmes of the same field of study implemented by LLU. The independent expert evaluation of the programme could be done by specialists of the relevant field (industry) (but not those involved in designing the programme) or representatives of other universities/colleges. The expert evaluation is organised by the Faculty being responsible for the programme.

The Senate, making a decision on the approval of the programme, appoints the programme director as well.

The procedure of development and approval of a new programme and the persons or institutions responsible for the implementation and supervision of it ensure that:

- the programme has been developed in line with the goal, which is subordinated to both the strategic goal of the field of study and is consistent with the LLU Development Strategy;
- expected learning outcomes have been clearly defined for the programme;
- the curriculum of the programme ensures the learning outcomes are achieved;
- the programme has been developed by involving students, employers, external experts and other stakeholders;
- the programme is in line with the four higher education objectives recommended by the Council of Europe;
- the programme has been developed in conformity with the level of higher education as defined in the national qualifications framework and, consequently, it is extended to the corresponding level of the qualifications framework of the European Higher Education Area;
- the programme has been developed to ensure that students can progress in their studies, and there are no barriers;
- the programme defines the expected workload of students;
- the programme provides an opportunity for students to have practical training.

The programmes contained in the field of study are regularly assessed and reviewed in order to ensure their proper performance and create a supportive and effective learning environment for students. Students, alumni, employers, industry experts and other stakeholders are involved in enhancing the programmes contained in the field of study.

In assessing a programme, students are involved in various ways. As regards the programmes with a large number of students, such as Entrepreneurship and Business Management and Economics,

the programme directors conduct a survey of students at the end of the academic year in order to identify the students':

- satisfaction with the content delivered and the way their learning is organised;
- ratings of the work of teaching personnel and mutual communication;
- opinions about whether the resources available for learning meet the standards defined by the programme.

Besides, students are given an opportunity to express their objections, suggestions as well as their wishes for the necessary improvements in the programme. In accordance with Paragraph 3.18. of the LLU Senate decision No. 9-81 of 12 April 2017 Regulations regarding Programme Directors, the programme director summarizes the data of student survey questionnaires, the students' objections, suggestions and wishes and designs measures for improvement. The programme director reports on the survey results at the responsible institute as well as at a meeting of the ESAF Board when discussing an annual self-assessment report. Students are informed about the survey results at meetings with the programme director. In addition, students get feedback by attending ESAF Board meetings as student representatives.

As regards programmes with a small number of students, the students are involved in enhancing the programmes during focus group meetings with the programme director. During such meetings, the learning process and the way it is organised, the content to be learnt, the work of teaching personnel, communication between a student and teaching personnel and the availability of material and technological resources are discussed. Students are given also an opportunity to express their opinions, suggestions and wishes. During focus group meetings, students get feedback on the matters being important to them. If solving a problem requires additional activities time, students are informed about the activities after having been implemented. The programme director summarises the results of focus group meetings and reports on the results to the institute responsible for implementing the programme as well as at a meeting of the ESAF Board when discussing an annual self-assessment report, in which students also take part.

Programme directors regularly meet with their students, ensuring information exchange and feedback during the meetings.

In assessing a programme, alumni are involved by means of surveys to identify the alumni's:

- satisfaction with the programme and its curriculum;
- ratings of the work of teaching personnel and mutual communication;
- satisfaction with the learning environment and the performance of university support services;
- future plans in the context of the programme.

In their questionnaires, alumni are provided with an opportunity to give their recommendations regarding the curriculum of the programme in order to update it so that it meets labour market needs, as well as recommendations on the way the learning process is organised. The programme director summarises the survey results and reports on the results to the institute responsible for implementing the programme as well as at a meeting of the ESAF Board when discussing an annual self-assessment report. Alumni get feedback by:

- joining the association **Club of LLU Economists;**
- participating in the ESAF Alumni Week;
- representing employers in the State Final Examination Committee;
- taking part in alumni gatherings (once every five years) when it is reported on what has been achieved over the past five years.

On 20 March 2013, the **association Club of LLU Economists** was founded for the purpose of closer cooperation between ESAF and its alumni, i.e. employers and professional associations. The objectives of the Club of LLU Economists are as follows:

- promote cooperation and experience exchange between ESAF and its alumni to raise the quality of studies;
- participate in lectures, seminars, conferences and support study tours and other similar activities;
- cooperate, as far as possible, in the development of projects and the build-up of research skills and competences in academic personnel;
- encourage potential students to study at the university by arousing their interest in the professions of economist and manager and explaining their importance in the national economy of Latvia;
- contribute to knowledge transfer and cooperation with employers through finding work placements and potential jobs for students.

The membership of the association Club of LLU Economists totals 82 alumni. During meetings, the members discuss the curricula of programmes in view of the latest findings in a particular industry as well as the enhancements needed.

The assessment of a programme (especially in the context of learning outcomes achieved) through graduate theses and their defence is done also during the work sessions of final examination committees, in which employers are also included. After a Final Examination Committee has completed its work session, a report is prepared on the work of the Committee in accordance with the vice-rector for studies ordinance No. 02.1-03 / 78 On the Procedure of Preparation of Reports on Final Examinations at LLU. Before preparing a report at the end of the session, the quality of graduate theses, the learning outcomes demonstrated by the students during their defences and suggestions for enhancing the learning process and the programme are discussed. The marks of graduate theses also reflect the level of learning outcomes achieved in the programme.

In accordance with the above-mentioned procedure, when approving a report at an ESAF Board meeting, its content is reported by either the chair of the final examination committee or the vice-chair of the committee, that is, the programme director. The report is also delivered at the ESAF graduation ceremony, thereby providing feedback.

Paragraph 5.2 of the LLU Traineeship Regulation (available at: https://www.llu.lv/sites/default/files/2018-10/Prakshu_nolikums_ar_2014_2018_1.pdf) states that the student has to have a reference of the work placement supervisor from the hosting organisation, which is submitted to the institute within the timeframe specified. During the defence of the work placement report, the reference is also analysed for the purpose of enhancement of the programme. The content of the reference is discussed with the student during the defence of the work placement report. Along with the work placement supervisor's reference, the student has to also submit a questionnaire completed by the employer – the hosting organisation –, which aims to find out the employer's:

- opinion on the student's preparedness for the labour market;
- assessment of the student's competences.

The employer is also asked to make suggestions for enhancement of the programme. The questionnaires and references of work placement supervisors are summarised by the programme director or the teaching personnel member responsible for the organisation of training, and the results are reported at a meeting of the institute responsible for the implementation of training as well as at an ESAF Board meeting when discussing the annual self-assessment report.

The programmes contained in the field of study are assessed by also industry professionals within project No. 8.2.3.0/1/A/009 Enhancement of the Governance of Latvia University of Life Sciences and Technologies. The project intends to:

- assess the programmes;
- draw up a modernisation plan for the programmes;
- enhance the programmes;
- build up the programme directors' knowledge of and skills and competences in curriculum development and management of the quality of the learning process and learning outcomes as well as in development and introduction of innovative curriculum content and teaching approaches etc.

During the assessment of the programmes, industry professionals meet with the programme directors and discuss the curricula of the programmes and their conformity with labour market needs. Any programme director follows the learning outcomes of students in the courses contained in the programme, which is an indicator of the level of expected learning outcomes achieved. The programme director meets with the teaching personnel members delivering courses in which learning outcomes are poor to discuss the reasons of it and find solutions to this problem. The students are also heard in relation to the reasons of poor learning outcomes.

The programme's goal and expected learning outcomes are also revised along with the approval of a new planning period for the LLU Development Strategy, as the goals of the programmes contained in the field of study are subordinated to the strategic goal of the field of study, which, in its turn, is subordinated to the LLU Development Strategy. Any strategic goal, programme goals and expected learning outcomes to be enhanced are discussed when approving the annual self-assessment report.

LLU has developed the procedure Preparation of an Annual Report on the Field of Study, which prescribes activities for the preparation and review of an annual report on the field of study according to vice-rector for studies ordinance No. 2.4.-5/70 of 29 September 2015 Procedure of Preparation of a Self-assessment Report and an Annual Report on the Field of Study. In accordance with the procedure, reports on the field of study are discussed at a meeting of the ESAF Board, then reviewed at a meeting of the Council for Studies, approved at a meeting of the LLU Senate and published on the LLU website (https://www.llu.lv/lv/studiju-un-reglamentejosie-dokumenti).

The programme director's obligation is also to revise the programme's curriculum and make amendments to it according to the enhancements necessary for the programme. LLU has developed the procedure Making Amendments to the Study Plan of a Programme, which regulates the study plan of any programme and the procedure of approval of amendments to it at LLU in accordance with vice-rector for studies ordinance No. 2.4-5-5 of 27 February 2015 On Plans of Programmes and the Approval of Amendments to the Plans and other internal regulatory documents. The procedure stipulates that the programme director has to inform the head of the relevant department/centre/institute and the dean of the relevant Faculty about the amendments made and the amendments have to be discussed by the Methodology Commission and approved by the Faculty Board; besides the LLU Centre for Studies has to be informed about the amendments, submitting an enhanced study plan and a justification for the amendments made. The stakeholders are informed about the amendments by making the enhanced study plan on the LLU website (https://www.llu.lv/lv/studiju-programmas).

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 direction and the relevant study programmes are communicated by providing the respective examples.

During their studies, students have an opportunity and the right to submit suggestions and complaints about their learning process and related matters. Students may submit suggestions:

- in writing or orally at Faculty level – to the programme director, the director of the institute, the vice-dean or dean;
- in writing or orally at LLU level – to the Centre for Studies, the vice-rector for studies, the Council for Studies and the Senate that discuses and approves various internal regulatory documents.

The LLU **Regulation of Studies** (Paragraph 5), which is available on the intranet Mans LLU, prescribes the procedure of submitting and processing complaints (appeals).

The student has the right to submit a complaint about:

- the mark assigned for his/her graduate thesis;
- the way the learning process is organised and managed;
- the tuition fee;
-

If a student has submitted a written complaint, after processing it, s/he will receive a written reply if the complaint has been processed without the student being present.

The highest dispute settlement body where a student can submit a complaint is the LLU Court of Arbitration, which is governed by its Statute.

Not a single complaint has been submitted in writing by a student of the field of study. All the complaints have been settled orally.

The Faculty of Economics and Social Development has developed the **Procedure for the Consideration of Suggestions and Complaints**, which has been approved by the dean (http://www.esaf.llu.lv/sites/esaf/files/2019-10/Ierosin%C4%81jumu%20un%20s%C5%ABdz%C4%ABbu%20izskat%C4%AB%C5%A1anas%20proced%C5%ABra%20ESAF_2019.pdf).

The need for the procedure of processing suggestions and complaints is determined by the LLU Quality Management System that is based on the key principles and requirements of the international Investors in Excellence standard.

The procedure of processing suggestions and complaints pertains to the quality of:

- the learning process;
- infrastructure and material and technological resources;
- methodologies and informational materials;
- functional quality.

A suggestion or complaint **may be submitted** to ESAF by:

- a student;
- a student group;

- academic and administrative personnel;
- a group of personnel or an ESAF organisation unit.

The procedure defines the way a suggestion or complaint is processed.

Examples of complaints/suggestions (oral): several oral complaints have been received about cooperation problems with supervisors for graduate theses; after listening to the complaints and analysing the problems, depending on the situation, in most cases the cooperation/communication problems with the teaching personnel were solved.

There have been oral complaints/suggestions regarding a semester plan, and the problems were solved by re-planning the sequence of courses or rescheduling traineeships. There have also been oral suggestions from students about the opening hours of the Centre for Studies and Scientific Information; a solution was found by extending the centre's opening hours and availability on weekends.

2.4. Provide information on the mechanism for collecting the statistical data, as developed by the higher education institution/ college. Specify the type of the data to be collected, the collection frequency, and the way the information is used to improve the study direction.

Statistical data and performance (learning and research) data are collected at certain intervals according to the purpose of use and functional levels of the learning process and research. **Learning performance data are collected** based on both external requests for data on students, alumni and academic personnel and internal requests in line with the purpose of use defined.

At LLU level, data on all the Faculties, fields of study and programmes are collected and analysed. One a month, the following statistics are collected: (1) the number of students by programme, kind and form of studies, field of study and Faculty – the data are sent to the administration of LLU and the deans of the Faculties. The data are used to track the change in the number of students at LLU; (2) the number of occupied government-funded study places – the data are collected by programme to track this statistic. The data are used to project the number of students to be admitted to fill in vacant government-funded study places and for the rotation of students every semester (the government-funded study places are filled on a competitive basis); the data are sent to the administration of LLU and the deans of the Faculties as well as the vice-deans, if needed. Once an academic year, data are collected on: (1) the number of graduates by programme, field of study, Faculty and kind of finance – the data are used to prepare various reports (e.g. an annual report on LLU, available at: https://www.llu.lv/lv/llu-pamatdokumenti); (2) the number of admitted students by various categories. The number of students admitted is used to project and plan the admission for the next year; (3) an LLU statistical data summary, Augstskola-1 (University-1), is prepared for the Central Statistical Bureau (CSB) based on the forms supplied by the CSB. The data summarised are sent to the Ministry of Education and Science and are available to the public (https://izm.gov.lv/lv/publikacijas-un-statistika/statistika-par-izglitibu/statistika-par-augstako-izglitibu). The data are also used to draw up various reports (e.g. an annual report on LLU). Once a calendar year, data are collected on: (1) the fields of study – a statistical summary is based on data for the previous year: the number of students by programme, kind and form of studies, the number of graduates and drop-out students and the reasons of drop-out and the number of foreign students. The data are given to all the programme directors, and the data are used for analysis and

to prepare an annual report on the field of study (https://www.llu.lv/lv/studiju-un-reglamentejosie-dokumenti); (2) the number of occupied government-funded study places on an annual basis – the data are used to prepare reports on compliance with the terms and conditions of an agreement among LLU, the Ministry of Agriculture and the Ministry of Education and Science; (3) performance of the programmes in accordance with the LLU Development Strategy 2015-2020 – the data are used to prepare annual reports on achieving the targets set by the strategy and to set new targets for the next year. The reports are presented and discussed at in-person meetings at each Faculty.

At Faculty level, data are collected (for collection frequency and responsible persons, see Table 2.3) and analysed against the targets set in the Education Section of the Strategy (see Table 2.4).

Table 2.4

Education/learning performance of ESAF (for 2018)

Performance indicator	2018	
	Target	Achievement
Number of students as at 1 October, incl.:	839	751
Bachelor	521	504
Master	214	199
Doctoral	49	31
Foreign students at all the levels of studies	55	17
Revenue from tuition fees (excluding foreign student tuition fees), thou. EUR, a year	521	349.53
Revenue from foreign student tuition fees, thou. EUR, a year	98	71.79
Quality of studies (student average rating on a 5-point scale)	4.25	4.31
Number of foreign visiting lecturers whom LLU has concluded a teaching contract with, a year	2	2
Number of teaching personnel who developed their competences	30	39
Number of joint programmes implemented in cooperation with foreign partners	1	1
Number of master and doctoral programmes implemented by use of modules	2	0
Number of programmes employing innovative distance learning methods	1	1
Number of programmes funded by the government in which the number of students is below the minimum set by the Ministry of Education and Science	x	x

Number of bachelor programmes in which the number of students is less than 60	1	1
Number of master programmes in which the number of students is less than 30	1	1
Number of doctoral dissertations supervised by representatives (incl. as second supervisors) of LLU institutions to be consolidated and of foreign cooperation partners, incl.:	4	1
representatives of LLU institutions to be consolidated	4	0
representatives of foreign cooperation partners (incl. foreign research institutions)	0	1

Research performance data are collected for a specific performance purpose and broken down by level:

At Faculty level, the data are collected once a year to analyse and assess the performance against the targets. The operational plan of ESAF contains a section for research performance, and an analysis and assessment of the performance is used to examine the performance in relation to the targets set by the LLU Strategy (see Table 2.5).

Table 2.5

Research performance of ESAF

Performance indicator	2018	
	Target	**Achievement**
Number of full-time equivalent (FTE) researchers	10	7.45 elected researchers 27.74 acad. personnel 0.54 research assistants
Number of new doctors of science (degree earned less than 10 years ago) working at LLU, incl.:	20	22
doctors of science who earned the degree less than 5 years ago	23	9
Research project funding and basic funding for science and research, thou. EUR a year, incl.:		1 422 211
Enterprise (private) funds for research, thou. EUR a year	30	45 938
Number of research papers a year, incl.:	170	189

international research papers indexed by *Scopus* and *Web of Science*, a year, incl.:	65	27
doctoral *student international research papers indexed by Scopus and Web of Science, a year*	14	3
Number of research papers published in journals indexed by Scopus and Web of Science, a year	8	7
Number of research papers published in journals indexed by Scopus and Web of Science, the impact factor of which is at least 50% of the average citation index for the industry, a year	1	1
Number of popular science articles, a year	20	44
Number of international conference abstracts		47
Number of international research papers with at least one foreign co-author	7	10
Number of research papers co-authored by private sector participants, a year	3	13
Number of EU programme Horizon 2020 project proposals prepared and submitted that acquired at least a minimum score	6	1

Individual performance – the contribution of each academic personnel member to science is identified once a year, and part of the performance relates to that of ESAF as stated by the Operational Plan, while part of the performance is assessed individually for each personnel member in accordance with the LLU Council of Science decision (29 November 2017) On the Assessment of the Scientific Performance of LLU Academic Personnel, Leading Researchers and Researchers. Such an assessment analyses the numbers of research projects, research papers, patents, doctoral dissertations supervised, publicity, the number of papers peer-reviewed and organisational activities. The data are uploaded to the LLU Information System (in accordance with the LLU rector ordinance (9 November 2015) On the Classification of Research Papers, Data Collection and Uploading to the LLU Information System), and an individual scientific performance portfolio is maintained therein.

At institute level, the individual performance of each academic personnel member as well as each institute's activities in science and research are summarised once a year and submitted to the LLU Science Centre to analyse the institute's performance in science and research with regard to the LLU Strategy.

The data obtained (on learning, scientific performance, business performance and management performance) are used for annual assessments of the LLU Strategy, the Strategies of the LLU Faculties, the strategies of fields of study and programmes and for drawing up future operational strategies and plans.

2.5. Description and assessment of the integration of the standards set forth in Part 1 of the ESG. Specify which of the standards are considered a challenge and which require special attention.

The internal quality assurance system in the field of study and the programmes contained therein for all the levels of studies is developed in accordance with the European standards, quality assurance requirements and key principles in higher education as prescribed by the European Network for Quality Assurance in Higher Education (ENQA). The internal quality assurance system is based on the key principles of European quality management and the standards set in Part 1 of the guidelines of the European Foundation for Quality Management (EFQM). This approach is used to ensure continuity in the identification of problems, the analysis of their causes and effects, the development of a plan for potential solutions and the assessment and implementation of a new solution.

The programmes contained in the field of study are regularly assessed according to the internal quality assurance system (see Section 2.2.1) and in accordance with the European standards and guidelines for internal quality assurance according to nine criteria as prescribed by relevant LLU and national documents.

An essential part of the internal quality standards and guidelines **is incorporated** in the field of study. The standard Learning Resources and Support for Students has **been partly implemented**. Assigning and allocating learning resources and support to students takes into account the diversity of the student community (students with life experience, part-time, working and foreign students and students with special needs). At several student hostels and Faculties of LLU, where reconstruction was carried out, necessary facilities for the disabled are available, thereby ensuring access to education for any student. Lifts, specially equipped amenities, ramps, as well as well-equipped rooms are available in some buildings. Information on the environment in particular LLU buildings is available at: https://www.llu.lv/lv/vides-pieejamiba-personam-ar-invaliditati. Still, a **challenge** is the accessibility of the ESAF building for students with special needs – no ramp, lift and facilities are specially adapted for disabled persons.

Table 2.6

Standards and guidelines for quality assurance in the European Higher Education Area (EHEA).

Part 1

Standards	Guidelines	Integrated	partly integrated	Challenge
1.1. Quality assurance policy	• introduction of a quality assurance system	X		
	• all the organisational units, the administration and individual personnel members and students are responsible for quality assurance	X		
	• academic integrity and freedom, no tolerance for academic fraud	X		
	• combating of all the forms of lack of tolerance for and discrimination against students or personnel	X		
	• involvement of external stakeholders in quality assurance	X		
1.2. Development and approval of programmes	• programmes are designed in accordance with the strategic goal, which is in line with the LLU Strategy, and have expected learning outcomes clearly defined	X		
	• programmes are designed by involving students and other stakeholders	X		
	• external expert evaluations are done and benchmarks are employed	X		
	• four higher education objectives recommended by the Council of Europe are taken into account	X		
	• expected workloads of students are identified by using the ECTS	X		
	• if necessary, well-planned work placement is included	X		
	• programmes are subject to the procedures of approval set by LLU	X		
1.3.1. Student-focused learning – introduction and delivery	• the diversity of the student community and their needs have to be taken into consideration and respected in designing appropriate learning pathways	X		
	• various programme delivery ways, where applicable, have to be taken into consideration and used	X		
	• where appropriate, a variety of pedagogical methods are used	X		
	• learning approaches and pedagogical methods are regularly analysed and applied	X		
	• students' desire for independence is promoted, while providing leadership and support to teaching personnel	X		
	• mutual respect in the relationship between the student and teaching personnel is promoted	X		
	• appropriate procedures exist to deal with student complaints	X		
1.3.2. Student-focused learning – assessment	• teaching personnel are familiar with the methods of testing and examination and receive support to develop their skills in this area	X		
	• assessment criteria and methods, as well as the criteria for marking, have been made public in advance	X		
	• assessment gives students an opportunity to demonstrate the extent to which they have achieved the expected learning outcomes. If needed, students receive feedback that provides guidance on the learning process	X		
	• where possible, more than one examiner does the assessment	X		
	• assessment rules take into account the different circumstances that students have encountered	X		
	• assessment is consistent, fair to all students and implemented in accordance with the procedures approved	X		
	• there is a procedure for processing student appeals	X		

Standards	Guidelines	Integrated	partly integrated	Challenge
1.4. Student matriculation, learning, recognition of qualifications and certification	• there are appropriate procedures for admission, qualification recognition and programme completion, including especially in case of student mobility both within and between higher education systems	X		
	• admission policies, matriculation procedures and criteria are implemented in a consistent and transparent manner. Introductory information about the institution and the programme is given	X		
	• there are a procedure and tools for collecting and summarizing data and monitoring the progress of student learning	X		
	• an unbiased recognition of higher education qualifications, periods of study and previous education, including non-formal and informal learning	X		
	• at the end of their studies, students receive documents specifying their qualifications, including learning outcomes, as well as the context, level, content and status of the studies they have done	X		
1.5. Teaching personnel. The environment at LLU and the Faculties	• clear, transparent and fair procedures for personnel recruitment and working conditions that demonstrate the importance of learning are established and maintained	X		
	• opportunities encouraging teaching personnel to develop their professionalism are provided	X		
	• scientific research activity is stimulated, thus strengthening the link between education and science	X		
	• innovation in teaching methods and the use of new technologies are promoted	X		
1.6. Resources for learning and support for students	• there is a range of resources for student learning: libraries, equipment, IT infrastructure and human resources – teaching personnel, learning consultants, support services and other advisers are available	X		
	• the diversity of the student community (students with life experience, part-time, working, foreign students, students with special needs) is taken into account when planning, allocating and assigning learning resources and support for students	X	X	X
	• all the resources are fit for the purpose for which they are intended, and students are aware of the services available to them	X		
	• support and administrative personnel are qualified and have opportunities to develop their competencies	X		
1.7. Information management	• key performance indicators of the university	X		
	• the profile of the student community	X		
	• student learning progress, marks earned and drop-out rates	X		
	• students' satisfaction with the programme	X		
	• available teaching aids and support for students	X		
	• career opportunities for graduates	X		

Standards	Guidelines	Integrated	partly integrated	Challenge
1.8. Publicity	• information on the activities of LLU is useful for current and potential students, alumni and other stakeholders and the public	X		
	• LLU provides information on its activities, incl. on the programmes delivered, selection criteria for admission, expected learning outcomes upon completing the programmes, the qualifications to be awarded, the teaching, learning and assessment procedures used, passing marks or minimum requirements for completing courses and learning opportunities available to students, as well as graduate employment	X		
1.9. Assessment and periodic updating of programmes	• the curriculum of a programme takes into account the latest research findings in the particular field, thus ensuring the programme meets labour market needs	X		
	• changing needs of the society	X		
	• student workloads, progress in student learning and graduation	X		
	• effectiveness of student performance assessment procedures	X		
	• students' expectations, needs and satisfaction with the programme	X		
	• the learning environment and support services and their conformity with the programme's goal	X		

II - Description of the Study Direction (3. Resources and Provision of the Study Direction)

3.1. Provide information on the system developed by the higher education institution/ college for determining the financial resources required for the implementation of the study direction and the relevant study programmes. Provide data on the available funding for the relevant study programmes, as well as the sources of the funding for the scientific research and/or artistic creation activities and their use for the development of the study direction. Provide information on the costs per one student (for each relevant study programme of the study direction) by specifying the headings indicated in the calculation of costs and the percentage of the funding among the indicated headings.

The LLU Financial Planning Centre, which performs financial planning in accordance with the financial management regulations of the Republic of Latvia and other regulatory documents, is responsible for spending financial resources in accordance with the LLU financial management policy, strategy and tactics. Each year, the LLU Senate approves the distribution of ***LLU consolidated budget revenues and expenditures*** and the LLU budget, which is drawn up in accordance with the (annual) Law on the State Budget passed by the Saeima. Budgetary control and audit is carried out by an independent group of auditors whose report is also approved by the LLU Senate. Prior to the approval of the consolidated budget estimate by the LLU Senate, the financial plan and results are discussed and reviewed by the Working Group on Resource Use and Development (LLU rector's ordinance No. 4.3.3-13168), which includes all the deans, the financial chancellor, the rector, the vice-rector for studies, the head of the Resource Accounting Centre, an economist, a lawyer, the head of the Financial Planning Centre, etc.

The key line items of consolidated budget revenues and expenditures for 2019 are as follows:

- a State budget transfer for ensuring the learning process: EUR 9 451 938, including EUR 7 598 273 for remuneration, EUR 587 109 for scholarships, EUR 882 271 for cost-shared expenditures and EUR 384 285 are at the disposal of the Faculties;
- LLU tuition fee revenue: EUR 1 885 268, including EUR 1 121 161 for remuneration, EUR 377 053 for cost-shared expenditures and EUR 377 054 are at the disposal of the Faculties;
- research revenue/expenditure: EUR 4 483 825, including basic research funding of EUR 935 223, research performance funding of EUR 346 196 and EUR 3 202 406 from other research projects;
- ERASMUS revenue/expenditure: EUR 506 850;
- donations: EUR 10 000.

The LLU Senate has approved a procedure for proportional budget revenue/expenditure distribution, which stipulates that of the total State funding for the implementation of programmes, 80% could be spent on remuneration and 20% could represent other costs. Of the total tuition fee revenue, 60% is spent on remuneration and 40% represents other costs, of which 20% is at the disposal of the Faculty implementing the particular programme and the other 20% is cost-shared expenditure. Of the total basic funding for research, 50% is at the disposal of the Faculty and the other 50% is cost-shared expenditure.

The distribution of the study places funded from the government budget and the basic costs of a study place are agreed in a trilateral agreement among LLU, the Ministry of Agriculture and the Ministry of Education and Science. The trilateral agreement of 2019 was concluded on 21 December 2018. The agreement stipulates that the basic costs of one study place is EUR 1518.98 and the social security costs of a study place is EUR 164.34 (for bachelor and master studies) and EUR 2034 for doctoral studies. The cost factor for social sciences – the corresponding field of studies – is 1 for bachelor programmes, 1.5 for master programmes and 3 for doctoral programmes.

The consolidated budget of LLU and the **budgets of the Faculties** show total revenue broken down by source and by expenditure purpose as well as by type and code of the expenditure. The main line items of budgets of the Faculties for 2019 are as follows:

- goods and services: 17%, of which the most significant ones are electricity, sewerage, heating, waste costs – 30%, building maintenance costs – 16% and equipment maintenance costs –12%;
- room repairs and computer hardware repairs, technical maintenance, copier maintenance and servicing, security equipment maintenance, etc. total 12%;
- costs of services provided by other organisational units of LLU – transport services, Science and Technology Centre services, warehouse services, sanitary engineering services, Communication Centre services, communication services, etc. amount to 14%;
- 10% of the budget is spent on office supplies and stationery, subscriptions to the press by the Centre for Studies and Scientific Information, learning materials, textbooks, e-materials, databases and manuals.

The total revenue of the Faculty is shown in the Faculty's annual strategy report, which is presented to the Faculty Board.

At LLU, tuition fees are approved each year in June by a rector's ordinance. For the academic year 2019/2020, the rector's ordinance (No. 4.3-8/63 of 17 June 2019) specifies the following tuition fees:

Table 2.7

Annual tuition fees for the academic year 2019/2020, EUR

Level of studies and programmes	Full-time studies	Part-time studies	Full-time studies in English
BACHELOR STUDIES			
Entrepreneurship and Business Management, p(b)	1200	1000	
Business Studies, 1st level.		900	
MASTER STUDIES			
Business Management, p(m)	1500		2400
Project Management, p(m)	1500		
Agri-food Business Management, a (in English)			2520

Research funding consists of funding for projects that is allocated for the implementation of specific scientific and research projects, remuneration for researchers and leading researchers within the projects, and the costs of performing specific project tasks. Basic funding for research, which is acquired owing to active research, is distributed according to the research performance of leading researchers and researchers. In accordance with LLU Council of Science decision No.17-6 of 28 November 2017 On the Assessment of the Scientific Performance of LLU Academic Personnel, Leading Researchers and Researchers, basic funding for research is allocated to: 1) remuneration for the contribution of each leading researcher and researcher, which is measured in points, and their research performance, in points; 2) co-funding for research projects implemented; 3) development of research infrastructure; 4) co-funding for research activities; 5) financial support for leading researchers and researchers – conference attendance, conference fees, participation in scientific symposia, etc. The amount of research funding for ESAF is shown in Table 2.8.

Table 2.8

Research funding for ESAF in 2014-2018, EUR

Year	Funding attracted trough research projects	Basic funding for research
2014	206 384	0
2015	117 933	20 000
2016	207 111	45 840
2017	509 761	88 791
2018	1 225 963	110 077

3.2. Provide information on the infrastructure and the material and technical provision

required for the implementation of the study direction and the relevant study programmes. Specify whether the required provision is available to the higher education institution/ college, availability to the students, and the teaching staff (the specific equipment required for the relevant study programme shall be indicated in Part III, Chapter 3 below the respective study programme).

The learning process in the field of study occurs mostly in the building of the **Faculty of Economics and Social Development** at 18 Svetes Street, where there are 19 classrooms with a total floor area of **4123 m^2**, and at the LLU main building at 2 Liela Street, where five auditoriums are available, as one of the organisational units of ESAF – the Institute of Social and Human Sciences – is located there. There are 21 classrooms equipped with desktop computers and projectors or TV sets, and two classrooms with projectors. There are 36 printers and 14 copiers, 23 portable computers available at ESAF. Three computer classrooms with 64 places are at the disposal of students. Computer software is available for learning project management and accounting. The material and technical resources of the ESAF classrooms are modernised and supplemented each year within the financial means available.

The delivery of the programmes contained in the field of study requires using the common material and technical resources of LLU and those of the other Faculties or facilities, which are as follows:

- Faculty of Agriculture;
- Faculty of Engineering;
- Forest Faculty;
- Faculty of Environment and Civil Engineering;
- Faculty of Information Technologies;
- Faculty of Food Technology;
- LLU Sports Centre, where a swimming pool is also available, etc.

Classrooms in all the Faculties are equipped with audio and video equipment (e.g. computers, projectors, screens, interactive whiteboards and chalkboards).

Students and teaching personnel have at their disposal the Technology and Knowledge Transfer Division (TEPEK), which aims to promote the protection of intellectual property of scientists and companies and the commercialization of research results at LLU.

Hostels are available to students and academic personnel. LLU offers the services of seven hostels – at 1 Liela Street, 7 J.Cakstes Boulevard, 4 Akademijas Street, 26 J.Matera Street, 1 Peter Street, 19 Liela Street and 2 K.Helmana Street.

The LLU Sports Centre is available to students and academic personnel, at 1 Raina Street, Jelgava.

LLU has a modern and large library; for the opportunities and services provided by it, see Section 2.3.3.

Access to the wireless (Wi-Fi) Internet is provided to students, academic personnel and guests in all the LLU Faculties and other LLU buildings.

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 direction 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 direction, 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 options for the subscription to the databases.

System of methodological and information resources

The main goal of LLU with regard to the library collection is to provide the programmes with literature and learning materials. The Fundamental Library of LLU (hereinafter – the LLU FB) is an accredited library of national significance, which provides users with information resources.

The LLU FB aims to provide library users with information resources and services necessary for the learning process and scientific research. In order to ensure student-focused and up-to-date access to library resources for students, academic and research personnel, an information and methodological support system consisting of five mutually subordinate components has been established:

1. LLU FB documents governing the functioning of the information and methodological system;
2. administration and structure of the information and methodological system;
3. procedures for acquiring information and methodological resources;
4. basic processes of the information and methodological system;
5. the way the information and methodological system is funded.

The Statute of the LLU Fundamental Library specifies the principles of functioning of the LLU FB as well as the obligations, rights and liability (https://llufb.llu.lv/lv/informacija-par-biblioteku/latvijas-lauksaimniecibas-universitates-fundamentala las-bibliotekas).

The Rules for Using the LLU FB govern the general operational principles of the library, the acquisition of library user status and the exclusion from the list of library users (https://llufb.llu.lv/sites/llufb/files/dokumenti/LLU_bibliot_lietos_noteik.pdf).

Information, research and communication contact points have been established in some Faculties to ensure a student-focused and more accessible learning process:

- *Faculty of Economics and Social Development*: *the* **Centre for Studies and Scientific Information**;
- Institute of Social and Human Sciences: the Methodology Office;
- Faculty of Environment and Civil Engineering: the Information Centre;
- Forest Faculty: the Information Centre;
- Institute of Education and Home Economics of the Faculty of Engineering: the Information Centre;
- Faculty of Veterinary Medicine: the Information Centre.

The resources available at the above-mentioned centres are associated with the LLU FB, as the resources could be accessed through the LLU FB website (https://llufb.llu.lv/en/catalogues-and-databases/electronic-catalogues-information-centres-latvia-uni versity-life-sciences).

The library collection is **supplemented** based mostly on recommendations of teaching personnel. The Library Request Form is available on the Library's website (https://llufb.llu.lv/lv/pakalpojumi/gramatu-iegade-llu-fb-krajumam). Based on the requests of teaching personnel and other users of the library, the LLU FB purchases the requested publications. The LLU FB has developed a Collection Supplementation Policy, which states that the main priority is placed on the programmes delivered at and the research fields of LLU. In accordance with the Legal Deposit Law, the LLU FB, as a library of national significance, receives one copy from each printed and electronic publication in the LLU profile area.

Accessibility of the library online

The LLU FB provides library users with the literature or information necessary for teaching, research, scientific and consultative activities. The library collection is constantly supplemented to meet the needs of the fields of study.

Industry publications for studies and research are **available**:

- at the Lending point;
- at the Textbook Lending point;
- at the library reading room;
- at the FAO Depositary Library (United Nations);
- factual and bibliographic references on related topics could be obtained from the Bibliographic Information Division.

The sources of information that are not available in the library collection could be searched for through LLU network-subscribed databases or outside the LLU network through the LLU Information System, at the LLU Fundamental Library Reference and Information Centre, or **interlibrary loan services** could be used.

Information on the breakdown of the library's collection by science (% of the total collection) could be found at https://llufb.llu.lv/lv/informacija-par-biblioteku/bibliotekas-krajums.

The library's opening hours are tailored to the needs of the library's main users – students and teaching personnel. On weekdays, the **library is open** to its users from 8.30 to 19.00, on Fridays – from 8.30 to 17.00. The library is also open to the public on the first Saturday of every month, from 9.00 to 14.00. The working hours of the library's reading room and Reference and Information Centre during the period of individual studies and examinations are extended to 24.00. The catalogue and online databases are accessible all the time.

In order to make the library suitable for independent and research work, the LLU FB reader service total **area** is 787.1 m^2. The reading room has comfortable workspaces both in the hall and on the balcony. The Internet and Wi-Fi are available. The reading room has also a lounge with comfortable sofas. There is also the quiet reading room. The Reference and Information Centre has desktop computers and provide qualified consultant services.

Accessibility elements for persons with disabilities have been built in the LLU FB:

- signs with a schematic layout of the building and the location of a lift are available on the building wall;
- the building has a lift;
- specially equipped amenities have been built for persons with reduced mobility;
- signs for finding a room;
- marked stairs;
- the building could be entered with a guide dog.

Library in the digital environment – databases and search engines

The LLU FB offers its users various online databases and databases on other data carriers. Before being offered to users, databases are analysed for search capabilities, thematic coverage, chronological coverage, and access capabilities to meet the needs of the fields of study. Information on the databases and their descriptions are placed on the LLU FB website.

The library has purchased the search engine PRIMO DISCOVERY, which enables users to simultaneously search for information in subscribed and open access online databases, in the Electronic Joint Catalogue of libraries of national significance and in the databases created by the LLU FB (research papers by LLU teaching personnel and researchers, LLU master theses, etc.). Registering with an LLU IS user account allows the users to view their user accounts and extend expiration dates for borrowed items, order publications, access full texts in subscribed online databases and save the search results. The library's website provides the PRIMO Information Search Assistant. Access to online databases is provided 24/7 on the LLU network, and there is an opportunity to connect to subscribed e-journal and e-book databases outside the LLU network by using the LLU IS user account or EZproxy and the LLU IS user account.

The LLU FB users have an opportunity to search for information in the following subscribed foreign and national online databases:

- *CAB Abstracts*,
- *CRC Press* e-books,
- *EBSCO eBook Academic Collection* database covering a wide range of multidisciplinary topics and containing more than 228515 e-books,
- *EBSCO host* databases *Academic Search Complete, MasterFILE Premier* and others,
- *ScienceDirect Journals*,
- *Scopus*,
- SciVal,
- *Web of Science*,
- *Wiley Online Journals*,
- *Lursoft*.

The intensity of use of foreign databases subscribed by the LLU FB has been summarized by analysing the databases available to students, academic and research personnel in the relevant field and their usage statistics. As of 1 January 2019, the total **number of connection sessions** was 73.6 thousand, the **number of searches** was 408.7 thousand. The most popular database for users in terms of number of sessions was EBSCO and ScienceDirect Journal, while in terms of number of searches – Britannica and EBSCO.

In cooperation with the Cultural Information System Centre, various online databases are periodically available for trial for information search purposes.

The databases created by the personnel of the LLU FB are also offered to readers (https://llufb.llu.lv/lv/datubazes-un-katalogi/llu-fundamentalas-bibliotekas-veidotas-datubazes-un-katalogi):

- research papers by LLU teaching and research personnel;
- doctoral dissertations defended at LLU;
- conference proceedings of LLU;
- patent research papers by LLU teaching and research personnel;
- publications on LLU.

The LLU FB as a depositary library of the FAO and the national AGRIS centre takes part in

developing the international AGRIS database.

Services offered by the library

The following *free-of-charge* services are available at the LLU FB:

- use of computers with access to the Internet and Wi-Fi;
- an opportunity to use Autodesk EDU Master Suite 2018 (AutoCAD, AutoCAD Structural Detailing, Autodesk Robot Structural Analysis Professional, etc.), CorelDRAW X7, SPSS Statistics v21 and VISIO 2013;
- 4/7 access to library-based, subscribed and free online databases;
- borrowing of books, periodicals and other documents;
- training in use of full-text and bibliographic databases, a computer and the Internet;
- training for LLU teaching personnel, including online, in how to search for and retrieve information, create a personal account, add research papers from the LLU teaching personnel and researcher research paper database to the LLU IS personal account, use Mendeley, create a researcher identification number ORCID and research ID etc.;
- classes for doctoral, master and bachelor students, including in English;
- instructional aids for each target audience (scientists, students, other users) that are sent them on request;
- provision of references and advice on the library and its use;
- editing of bibliographies, a delivery of examples of a bibliographical description on request via e-mail;
- tailor-made exhibitions.

The following **paid** services are offered by the LLU FB:

- copying (coloured, black and white),
- printing (coloured, black and white),
- scanning,
- provision of written thematic references,
- SBA and SSBA services (costs of postal services must be covered),
- delivery of copies of documents (at the supplier's price),
- spiral binding.

The library offers the following **e-services**:

- use of the electronic catalogue 24/7,
- electronic book reservation, expiration date extension for borrowed items 24/7,
- use of the unified search engine PRIMO DISCOVERY,
- 24/7 access to library-based, subscribed and free online databases (both full-text and bibliographic),
- an opportunity to connect to subscribed e-journal and e-book databases outside the LLU network by using EZproxy and the LLU IS user account 24/7,
- use of Mendeley – a scientific information search application,
- an opportunity to use other online information resources from the library website,
- access to the electronic catalogues of the LLU Information Centres and Information Offices (BIS ALEPH500),
- an opportunity to use instructional materials on information resources, available on the library website, that have been prepared either by the LLU FB or by database maintainers,
- an electronic delivery of documents,
- "Write to the Librarian" on Skype,
- a Book Request Form on the library's website.

ESAF Centre for Studies and Scientific Information

The Centre for Studies and Scientific Information (hereinafter – the Centre) has been operating at the Faculty of Economics and Social Development since 1973. Originally known as the Economic Information Office, the purpose of its establishment pertained to the availability of subject-specific literature to the students of ESAF, so that the bibliographical collection would be closer to the place where students study. The Centre has grown into a Centre for Studies and Scientific Information whose primary role is to provide students and academic personnel with an environment where diverse and up-to-date student-focused approaches could be applied: there is an opportunity to find subject-specific literature: books, newspapers and magazines, digitally work with all the available databases and search engines and receive services: printing, scanning and copying.

The Centre is a place for studies, research and communication for national and foreign students, academic personnel and researchers. Students have four desktop computer workstations with Internet access for their competence development. The Centre's interior design is modern and creates a sense of an informal atmosphere; in a student-focused atmosphere, visitors have an opportunity to find an informative, scientific and creative solution to the problem by communicating, taking over other students' experience, creating a broader worldview, learning and exploring.

The collections of books and periodicals of the Centre are available to students and academic personnel of the other Faculties by directly visiting the library and using the unified LLU FB electronic catalogue for remote selection (https://llufb.llu.lv/lv/datubazes-un-katalogi/llu-informacijas-centru-un-informacijas-kabinetu-elektroniskie-katalogi).

The working hours of the Centre of ESAF are suitable for full-time and part-time students – on weekdays from 8.15 to 17.00, on Saturdays from 8.15 to 15.00.

To make the Centre suitable for independent and research work, its total reader service *area* is 84.7 m^2. The reading room has comfortable workstations both in the communication and service room and in the separate quiet room with four desktop computer workstations. The Internet is available as well. There is a qualified consultant available at the Centre.

The communication and service room has a lounge with comfortable sofas and rocking chairs, where periodically discussions between academic personnel and guest scientists take place.

Financing of information and methodological resources and the number of publications available

The funds of the *LLU FB* are an independent part of the LLU budget. The property of the LLU FB is the property of LLU and the LLU FB is directly subordinated to the vice rector for studies. The funds invested in the development of the LLU FB increased every year and reached *EUR 103 892* in 2018: purchases of books totalled – EUR 30 092, subscriptions to databases – EUR 64 179, periodicals – EUR 9621 and ALEPH – EUR 7664. As at 31 December 2018, the total collection of the LLU FB reached 406 593 copies and **123 949 titles**.

The LLU FB collection contains *5 325 various publications*: scientific monographs, books, proceedings of scientific research papers, results of scientific research, etc. for the needs of implementation of the programmes contained in the field of study. In the reporting period (2013-2019), the number of titles of publications has increased by 375, of which 209 or 55.7% are in foreign languages.

For the *Centre for Studies and Scientific Information*, books and other sources are purchased from the budget of the Faculty of Economic and Social Development. The Centre (2013 - 2018) has

purchased **books** worth EUR 4976.22: EUR 605.85 worth books in Latvian, while EUR 4370.37 or **88%** of the total – in foreign languages.

The Centre has a wide range of **Dienas Bizness (Daily Business) manuals** covering all the areas of the field of study. The subscription of Dienas Bizness manuals for the period of 2013 - 2016 amounted to EUR 3.9 thousand. At present, the Dienas Bizness manuals are updated in their digital editions. Dienas Bizness manuals are available only at the Centre of the Faculty of Economics and Social Development, and the volumes purchased are also used by students and academic personnel from the other Faculties.

The Centre offers a wide range of periodicals that provide information necessary for the field of study. In the period 2013-2018, EUR 5.7 thousand were spent on periodicals. These periodicals are only available at the Centre of the Faculty of Economics and Social Development.

According to the inventory data as at 1 October 2018, the Centre has purchased 632 books from the budget of ESAF, while the total number of books was **2116**, 70% of which was made up of gifts and donations. In the repository, books are organised by 59 topics.

In Latvia, s**ubscriptions to databases** for libraries are made by the Culture Information Systems Centre (KISC), an institution subordinate to the Ministry of Culture. KISC project specialists and lawyers perform database trials and conclude contracts with database suppliers. LLU concludes a contract for access to databases with the KISC, taking into account the profile and financial capacity of LLU as well as the results of database trials.

3.4. 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.

At LLU, the attraction and employment of teaching personnel (incl. job vacancy announcement, recruitment, election etc.) is governed by the Statute of Latvia University of Life Sciences and Technologies on Academic Job Positions approved by the LLU Senate (https://www.llu.lv/sites/default/files/2016-05/8-36_Nolikums_par_akademiskajiem_amatiem.pdf).

The number of positions of professors, associate professors and assistant professors in the relevant branches and sub-branches of science is determined by financial possibilities and the need for research activities and programmes as well as according to the personnel development plans of the Faculties. The number and positions of academic personnel are approved by the Boards of the Faculties, the Council for Studies, the Science of Council and the LLU Senate. Open academic positions are filled on an open competitive basis.

The general requirements, rights and obligations of applicants for academic positions are stipulated by the Law on Higher Education Institutions, Part IV, which defines the tasks to be performed by each group of academic personnel and the procedure for assessment of scientific and pedagogical qualifications.

All applicants for academic positions have to meet the following requirements:

- knowledge of the official language in accordance with the requirements of the regulatory framework;
- knowledge of foreign languages to the extent required for fulfilling duties of the academic position (including conducting classes in these languages);

- continuous improvement of their academic and scientific qualifications.

The **selection of academic personnel** is governed by the Statute of Latvia University of Life Sciences and Technologies on Academic Job Positions. Based on the information received from the organisational units of LLU on vacant academic positions, the LLU Personnel Department prepares a draft advertisement and submits it to the LLU Commission for Academic Personnel and Structural Policy for review (hereinafter – the Commission). Following the decision of the Commission, the Personnel Department prepares a draft proposal for vacant academic positions and submits it for consideration to the LLU Council for Studies or the LLU Council of Science, which forwards it to the LLU Senate for approval. Following the decision of the LLU Senate, the Personnel Department announces an open competition for vacant academic positions by publishing an advertisement in the newspaper Latvijas Vēstnesis (Latvian Herald) and on the LLU website.

According to the electoral procedure, the election of a candidate to the academic position is done by secret ballot: professors and associate professors are elected by the Board of Professors of the relevant branch of science not later than four months from the date of invitation to the competition; assistant professors, leading researchers, researchers, lecturers, assistants and research assistants are elected by the Boards of the Faculties not later than three months from the date of announcement of the competition; leading researchers, researchers and research assistants are elected by the Council of Science of the relevant research institute not later than two months from the date of announcement of the competition.

The Rector concludes an employment contract with the person elected for the term of office.

If LLU has a vacant academic position, the LLU Senate, based on the proposal of the Board of the Faculty, may decide not to announce the competition. In this case, the Rector may enter into a contract with a visiting professor, a visiting associate professor, a visiting assistant professor, a visiting lecturer or a visiting assistant for a fixed period of up to two years.

In accordance with the rector's ordinance On the Procedure of Recruitment of Foreign Visiting Lecturers, the LLU has developed a procedure for recruitment of foreign visiting lecturers. The procedure stipulates that a visiting lecturer may be invited by the responsible Faculty, or a foreign visiting lecturer has expressed a wish to carry out pedagogical /scientific activity at LLU.

The responsible Faculty assigns a course or research and pedagogical tasks to the foreign visiting lecturer that correspond to his/her competences. A legal employment relationship is established with the foreign visiting lecturer.

Academic personnel is hired on a full-time or part-time basis, depending on the **individual academic workload**, which is planned for each academic year in accordance with the LLU Statute on Academic Workloads and the rector's ordinance On the Planning, Accounting for and Control of Individual Workloads of Academic Personnel, which defines the components of workload of academic personnel, workload rates and the procedures of accounting for and control of the workload.

Salaries for academic personnel are determined in accordance with the Cabinet regulation Regulations regarding Remuneration for Pedagogues (https://likumi.lv/ta/id/283667-pedagogu-darba-samaksas-noteikumi) and the rector's ordinance On Remuneration for Pedagogues.

Academic personnel professional development involves participation in appropriate professional development programmes, exchange of experience and participation in conferences and seminars, as evidenced by the documents issued upon the completion. Every six years, academic personnel are entitled to six-month paid academic leave for research or for research

activities outside their workplace. The procedure for professional development to be performed is stipulated by the Cabinet regulation On the Education Required for Teachers and the Procedure for Development of Professional Qualifications of Teachers (http://likumi.lv/ta/id/269965). The regulation stipulates that the teaching personnel of a university have to acquire the necessary pedagogical qualification through continuing education in professional development programmes on innovations in the higher education system, university didactics or educational work management, 160 academic hours in length (including at least 60 contact hours), prior to the end of the term of office.

LLU implements the professional development programme for higher education pedagogues Innovations in University Didactics. The aim of the programme is to build up higher education pedagogues' knowledge of university didactics and possibilities of its application in pedagogical activity. Upon completion of this programme, a certificate is awarded.

3.5. 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 qualification (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.

Requirements for academic positions are prescribed by the Law on Higher Education Institutions of the Republic of Latvia (https://likumi.lv/ta/en/en/id/37967-law-on-higher-education-institutions). Qualifications of teaching personnel are stipulated by the Statute of Latvia University of Life Sciences and Technologies on Academic Positions (https://www.llu.lv/sites/default/files/2016-05/8-36_Nolikums_par_akademiskajiem_amatiem.pdf).
The statute prescribes the qualifications to be possessed by elected academic personnel for each kind of positions. The teaching personnel who are not elected at the relevant organisational unit need to meet the same requirements and have the same qualifications as those of the same academic level. The mentioned requirements are in accordance with the current regulatory framework of the Republic of Latvia that clearly specifies criteria for teaching personnel taking a particular academic position.

LLU has identified and described processes that contribute to the qualifications and work quality of teaching personnel. One of them is the process of **election and re-election of academic personnel**. It allows assessing the work quality of teaching personnel in the previous period and determining their eligibility for the positions for which they are applying (lecturer, assistant professor, associate professor or professor), and their compliance with the work quality criteria set by the regulatory frameworks of the Republic of Latvia and LLU. Professors and associate professors have to meet the unified national requirements for assessment of their scientific and pedagogical qualifications in accordance with Cabinet Regulation No. 391 of 4 September 2001. The procedure of assessment of scientific and pedagogical qualifications of a professor and an associate professor is intended to assess his/her scientific qualification achievements according to 8 criteria, pedagogical qualifications – 9 criteria, while organisational competence – 6 criteria.

To contribute to continuous professional development in higher education didactics, LLU delivers

the **professional development programme for higher education pedagogues** Innovations in University Didactics (160 h) that has to be taken by the academic personnel of LLU every six years. Since 2017, LLU has introduced a **motivation system for teaching personnel** (LLU rector ordinance No.43-8/10), thereby achieving the objective set by the LLU Development Strategy 2015-2020 – to update the motivation system for teaching personnel. The motivation system assesses the teaching personnel according to 14 criteria, which are divided into 5 categories: student assessment; preparation of teaching aids; learning process; organisational work; and professional development. The established motivation system allows earning an extra bonus for high-quality work. The quality assessment points obtained by a teaching personnel member are summed up, and each criterion is assigned a weight. The LLU Financial Planning Centre calculates the size of a bonus for each teaching personnel member based on the total score earned. This system allows the quality of teaching personnel to be assessed and the personnel to be rewarded according to uniform and comparable criteria. Teaching personnel are very positive about this system, which motivates them to raise the quality of their work. Another very important assessment of teaching personnel' work quality is **student surveys**. At the end of each semester, each teaching personnel member's work is assessed by students. Students make this assessment anonymously, electronically in the LLU IS (https://lais.llu.lv/). Students assess the work of their teaching personnel by answering six questions and giving ratings on a 5-point scale, with 5 points being very high and one point – very low. The ratings given by students are electronically available to each teaching personnel member who delivers a course, as well as to the director of the relevant programme and the director of the institute involved in the delivery of the programme. The programme director and the director of the institute take the ratings into account as far as possible when planning the work of teaching personnel for the next year. Based on the ratings, any teaching personnel member is encouraged to improve the performance and eliminate shortcomings in his/her work.

Since February 2019, in accordance with Council for Studies decision No. 2.4-14/2, LLU has introduced a unified **class hospitation procedure**, which is intended for the control of delivery of classes and exchange of experience. Hospitation is carried out by the programme director, the director of the institute or other LLU teaching personnel members. The teaching personnel who had been given suggestions or recommendations for improvement of their classes after the hospitation have to provide information about the improvement activities done (or planned). The hospitation practice introduced allows assessing and improving the work quality of academic personnel, making suggestions for the improvement and controlling the progress.

The opportunities offered by LLU to raise the qualifications of its teaching personnel are provided through several measures: 1) **ERASMUS + mobility programme**, which allows for the exchange of experience; 2) **participation in international scientific conferences and seminars** is funded within financial possibilities; 3) the annual **LLU Academic Conference aiming** to encourage teaching personnel to systematically develop their didactic competence and share their success with their colleagues has been held (since 1981). The LLU Language Centre offers an **English language course** (32 h) to university teaching personnel. Since 2010, LLU has been providing a professional development course Moodle e-Course Creation Management System.

Since 1998, LLU has been holding an annual contest of textbooks and teaching materials to promote the publication of new, original textbooks and teaching materials needed for the implementation of LLU courses. Textbooks and teaching materials for the contest are submitted by LLU teaching personnel to the Assessment Committee approved by the rector's ordinance.

In the reporting period (2013-2018), 88 works were submitted to the contest.

Teaching personnel have an opportunity to participate in international **scholarship contests and**

EU-funded projects aimed at raising the qualifications of teaching personnel through acquiring new knowledge and skills. For example, one doctoral student received a Fulbright Fellowship from the US Embassy in 2015 and, at the Agricultural and Environmental Research Centre of Oregon State University, mastered the Mathematical Methodology for Assessment of State Support Policy and Support Instruments, which was adapted to bioeconomic research. LLU implements the following ESF projects: No. 8.2.2.0/18/A/014 Development of LLU Academic Personnel, with the aim of raising the quality of the learning process through enhancing the competencies of the personnel and collaboration with industry and engaging doctoral students as well as foreign academic personnel; No. 8.2.3.0/18/A/009 Enhancement of the Governance of Latvia University of Life Sciences and Technologies, which intends to enhance the quality of the curricula of LLU programmes and, by making effective use of the resources available, to ensure better governance of the university and build up the competencies and skills of its administrative management personnel. The personnel engaged in the field of study are involved in implementing these projects. For example, in the academic year 2019/2020, within project No. 8.2.2.0/18/A/014, professional English was studied by nine teaching personnel members, five members were provided with internships at Green-Tech Latvia, which is an interdisciplinary business cooperation organisation bringing together businesses, education and research institutions as well as other organisations operating, in whole or in part, in the green and smart technology sectors. The project involves new doctoral students and foreign professors.

The teaching personnel engaged in the programmes of the field of study actively use and appreciate the opportunities offered by the university and the Faculty to build up their qualifications. The opportunities used result in updating syllabuses of the courses taught and enhancing the delivery of the courses technically, as the teaching personnel incorporate new techniques in their courses and apply them in their work. They learn the latest scientific findings, which are used to build up their professional skills and competences, and the overall quality of the programmes increases. Most of the teaching personnel participate in the decision-making body of ESAF – the Board – and in the Methodological Committees of the Faculties, thereby applying their experience in achieving the overall strategy of ESAF and organising the work process. Skills development provides an opportunity for teaching personnel to progress in their academic and research careers, be engaged in higher-level programmes and receive higher remuneration for higher-quality work.

Characteristics of professional development of the teaching personnel involved in the delivery of the field of study:

Kind of professional development	Academic year					
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
LLU Academic conference	31	18	27	29	24	11
Foreign language courses	2	9	10	9	12	2
Professional development programme for higher education pedagogues "**Innovations in University Didactics**" (160 h)	12	9	8	6	4	7
In-service training seminars held by LLU	-	-	-	18	21	15
Professional development seminars	18	36	26	-	45	-
Mobility (ERASMUS+, BOVA) activities	17	15	13	16	16	20
Professional development seminars and courses delivered outside	2	2	6	1	13	18
Participation in committees, organizations, enterprise boards, institutions etc.	14	20	20	26	21	21

3.6. Provide information on the number of the teaching staff members involved in the implementation of the relevant study programmes of the study direction, as well as the analysis and assessment of the academic and research workload. Provide the assessment of the incoming and outgoing mobility of the teaching staff over the reporting period, the mobility dynamics, and the issues which the higher education institution/ college must tackle with regard to the mobility of the teaching staff.

Eighty one teaching personnel are engaged in implementing the field of study. Most of the teaching personnel are employed by the four institutes of ESAF, yet some are from the other LLU Faculties (for example, the Faculty of Information Technologies) to deliver specific courses. In delivering the international programme Agri-food Business Management, four colleagues come from the Vytautas Magnus University Agricultural Academy (formerly Aleksandras Stulginskis University) (Lithuania) and five colleagues from the Estonian University of Life Sciences.

The workloads of the teaching personnel engaged in the field of study are calculated in hours, in accordance with the LLU Statute on Academic Workloads approved by the LLU Senate. An analysis of the situation in the academic year 2018/2019 reveals that the average workload of teaching personnel in all the institutes was in the range of 0.40-0.47. The total number of full-time equivalent jobs for the institutes of ESAF for the academic year 2018/2019 by level of academic position is summarized in Table 2.9.

Table 2.9

Full-time equivalent jobs broken down by level of academic position and by institute of ESAF (academic year 2018/2019)

	Professor	Professor (Emeritus)	Associate professor	Assistant professor	Lecturer

Institute of Economics and Regional Development	3.55	0.17	1.68	3.06	4.18
Institute of Finance and Accounting	1.81		0.75	1.27	3.48
Institute of Social and Human Sciences			3.63	6.39	2.37
Institute of Business and Management Science	1.61		3.3	3.14	6.11

The breakdown of workloads of teaching personnel by kind of work is shown in Figure 2.1.
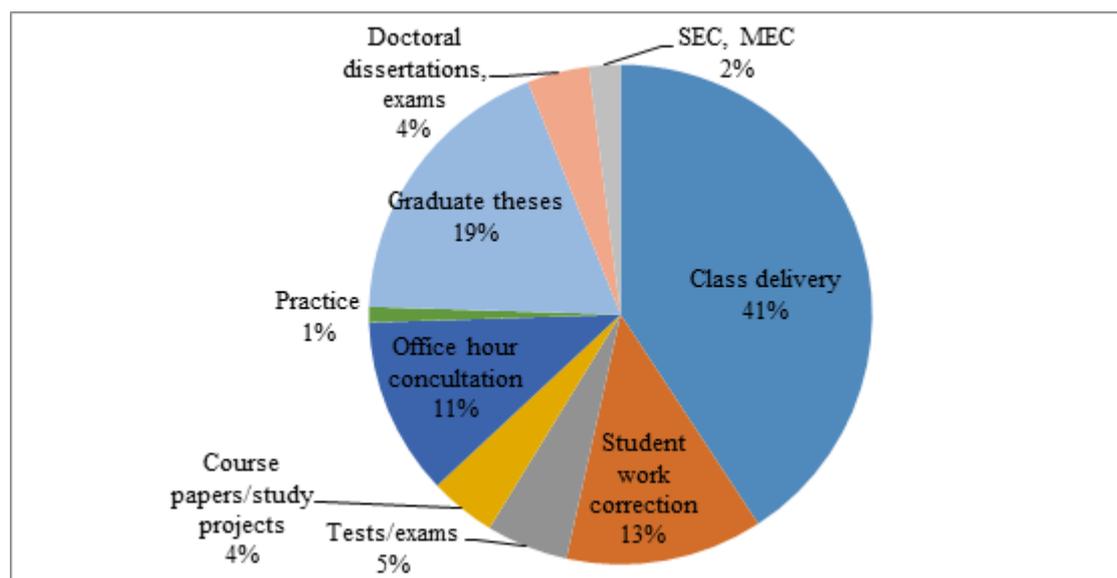
Notes: SEC – State Examination Committee: MEC – Master Examination Committee

Fig. 2.1. Breakdown of workloads of teaching personnel by kind of work in the academic year 2018/2019

As shown in Figure 2.1, 41% of the pedagogical workload is made up of delivery of classes. A significant part of the workload is comprised of student work correction and supervision of graduate theses. However, a relatively low percentage of workloads is comprised of the work of thesis defence committees, supervision/defence of practice and supervision of doctoral dissertations. For a more detailed breakdown of workloads by programme, see Section 3.4.1.

In addition to academic work, the teaching personnel of the field of study do research. In the academic year 2018/2019, the total workload of all the teaching personnel of the field of study equalled 57.68 full time equivalents.

Overall, incoming and outgoing mobility of teaching personnel has increased in the reporting period (see Annex 5). This was due to the increase in funding for ERASMUS mobility and a gradual increase in the popularity of ERASMS opportunities. In recent years, the teaching personnel of EASF have been competing for outgoing mobility. The ERASMUS programme is generally viewed as supportive of the learning environment.

Incoming mobility statistics for teaching personnel are mostly made up of guest lecturers during the International Week. Closer cooperation has been established with individual universities both in the field of guest lecturer exchange and in other activities such as BOVA courses.

3.7. 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.).

Financial support

Financial support in the form of scholarships is available to students during their studies (https://www.llu.lv/stipendijas). On a completive basis, students may apply for:

1. State scholarship – monthly bachelor's and master's scholarship is EUR 99.60, for doctoral studies – EUR 113.83;
2. One-time scholarship – during the semester, students may apply for one-time scholarship in the amount of two minimum scholarships;
3. Scholarship for acquiring a scientific degree – EUR 85.37 – in the form of a loan.

In addition, the LLU Development Fund offers students a total of 18 scholarship programmes (https://www.llu.lv/scholarships) ranging from EUR 40 to 1500. The scholarships are both monthly and one-time. Students of the programmes of the field of study may participate in the following scholarship contests:

- bachelor students – eight scholarship programmes: the Kārlis Ulmanis Scholarship, the LLU Senate Scholarship, the Janis Čakste Scholarship, the Jānis and Millija Kāvuši Scholarship, the Mirdza Oškalne Scholarship, the LLU Student Self-government Scholarship, the Jānis Vanags Scholarship and the Pēteris Birkerts Scholarship);
- master students – six scholarship programmes: the Kārlis Ulmanis Scholarship, the LLU Senate Scholarship, the Janis Čakste Scholarship, the Jānis and Millija Kāvuši Scholarship, the Mirdza Oškalne Scholarship and the Latvian Agricultural Cooperatives Association Scholarship).

Tuition fee relief for students

In accordance with LLU rector ordinance No. 4.3.-8./12 of 21 February 2018 Procedure of Granting Tuition Fee Relief to Students, (50-100%) relief may be granted to the following categories of **non-failing students**:

1. working employees of LLU who are enrolled on a doctoral programme;
2. LLU employees' children aged under 24 years of age;
3. persons with Group I or Group II disability who study full-time or part-time in bachelor or master programmes;
4. orphans or persons without parental care;
5. students being sportspersons (team members or candidates of the Republic of Latvia; if the team has a cooperation agreement with LLU and the team name includes the abbreviation LLU).

Support for foreign students

LLU provides support to students from abroad in relation to the following issues:

1. Foreign students apply for studies via the e-admission system Dream Apply, which provides partially formalized admission procedures, thereby significantly facilitating communication with LLU; coordinators of the International Cooperation Centre (SSC) individually answer specific questions of the applicants.

2. Any foreign student is provided with a room in a well-equipped student hostel.
3. To introduce foreign students to LLU and the learning and living environments and the Latvian cultural environment, a Welcome Week is organised in the first week of each semester, during which student consolidation events are held.
4. The LLU SSC provides technical support regarding acquiring/extending visas, residence permits as well as insurance.
5. The LLU SSC and foreign relations coordinators of the Faculties, as well as programme directors inform students from abroad about the internal rules of LLU and the relevant practices, give advice on learning and everyday life issues, help with paperwork and help to solve various problems.
6. There is an Erasmus Student Network group at LLU, as well as the LLU Student Self-government, which organises leisure and cultural activities for students.
7. LLU foreign relations coordinators inform foreign students about available health care by family physicians and at the Jelgava Polyclinic and, if necessary, perform the functions of an attendant.
8. Every semester, starting with the academic year 2019/2020, a survey of foreign students on the courses delivered is conducted, which reveals their satisfaction with the quality of the courses.

The **LLU Lifelong Education Centre** has active volunteer students who unite to develop their organisational and managerial skills, teamwork skills, critical and creative thinking, change management skills and teamwork skills. The League of Excellent Students has been established to represent ESAF and LLU at various events, exhibitions, promotional events etc. – from 2014 to 2019, 16 students represented ESAF. The LLU Lifelong Education Centre has created a system for taking courses as listeners, which is open to anyone interested. In the reporting period (2013-2018), 67 interested individuals used the status of listener. Students are offered various non-formal education courses. In May 2012, LLU introduced a *system for recognition of competences acquired outside formal education or through professional experience and learning outcomes achieved in previous education*, which was used by one student from ESAF in 2015; the student's 16 CP were transferred.

The **LLU Student Self-government** (LLU SP) is an organisation representing LLU students, which deals with important issues in the students' academic, social, cultural and sports life, represents and defends the students' opinions and rights. The LLU Student Self-government provides significant support for student involvement, adaptation and learning through:

1. Holding an introductory event On the Start Line at LLU for first-year students (freshers) as well as a seminar LLU & CHILL for them, during which the new students get familiarised with the learning environment, the Faculties, each other and later-year students.
2. Holding a seminar Breakthrough, which is open to any LLU student to gain experience in their own growth.
3. Representing LLU students' opinions in the Student Union of Latvia and the Senate, the Council, the Council for Studies and the Maintenance Board of LLU.
4. Holding social events with other HEIs that give students a greater opportunity to get familiarised with future professionals in similar fields.
5. Providing students with an opportunity to relax after their studies by organising educational and reunion events, sporting events as well as informal atmosphere events, e.g. Smart Owls, LLU SP Street Sports Games, FSP Sports Games, Meet & Greet and Loco Fiesto.
6. Participating in events organised by other HEIs, as well as organising events with other HEIs, e.g. KUBS, KRS?
7. Organising an LLU Annual Award contest together with student self-governments of the other

Faculties, thereby contributing to communication among the Faculties of LLU.

8. Cooperating with companies in Jelgava City, organising joint events, giving students an opportunity to participate in informal events, e.g. On the Start Line at LLU, Halloween and Unity Trip.

The **LLU Information Technology and Scientific Equipment Centre** provides all students with IT and technical support by providing the following IT support services:

- creating an LLU IS user account to provide the student with access to his/her personal and learning assessment data;
- creating a unified e-mail account;
- providing access to the Wi-Fi network;
- providing users with instructions (https://www.llu.lv/index.php/lv/llu-informativa-sistema).

All LLU students are provided with technical and methodological support for e-studies by a methodologist of the Centre for Studies (https://estudijas.llu.lv/course/view.php?id=570).

The programme directors, directors of the institutes and chief specialists of ESAF and the personnel of the ESAF Dean Office provide significant support in the learning process.

II - Description of the Study Direction (4. Scientific Research and Artistic Creation)

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

In the field of study, research is done in the following branches of social science (Group 5): economics and entrepreneurship (5.2), social and economic geography (5.7). The research priorities for the field of study are as follows: economics of sustainable development of bioresource industries; exploration of the potential for sustainable development of territories; efficiency of production processes and competitiveness of enterprises (https://www.llu.lv/lv/petijumu-virzieni). **All information about scientific research results, activities in Social Sciences LLU you can find here** http://socialsciences.llu.lv/en. The mentioned priorities were selected based on scientific competence and expertise in the field of study and meet the needs of the prospective economic industries as defined in the Smart Specialization Strategy of Latvia, in which the innovation capacity of Latvia has to be built up. Research activity is focused on two directions – fundamental and applied research. Strategic and long-term research goals for the filed of study are defined in the Research Programme of Latvia University of Life Sciences and Technologies 2015-2020 (hereinafter – the Research Programme), which stipulates the need to ensure excellence in research, which enhances technology and innovation, and is incorporated into the learning process (https://www.llu.lv/sites/default/files/2017-03/Strate%CC%84g%CC%A7ija%20gara.pdf). The LLU Research Programme defines specific, measurable targets to be achieved, such as the number of research papers published in SCOPUS and WoS-indexed publications, the number of research papers published in journals, participation in Horizon 2020 projects, the number of research papers co-authored by representatives of private sector companies and (private) funding for research. To

achieve the targets, several action plans have been developed at LLU level: 1) a targeted cooperation enhancement plan; 2) a plan for participation in the EU Framework Programmes for Research and Innovation Horizon 2020 and other research and innovation support programmes and technology initiatives; 3) a plan for increasing the number of international research papers; 4) a plan for knowledge and technology development; 5) a plan for developing human resources for research, which contributes to the overall LLU, incl. research, activity in the field of study and the creation and dissemination of a new knowledge and the transfer of it to the national economy. Progress in science and research activities and the achievement of the targets are assessed according to the following objectives of the action plans:

- attracting new scientists, while also contributing to an increase in the number of doctoral students:
  - 1.1.2. activity Postdoctoral Research Support – the project Assessment of the Bioeconomic Efficiency of Use of Legumes for Feed is being implemented;
  - LLU internal support tools for new scientists: a grant competition Strengthening Scientific Research Capacity at Latvia University of Life Sciences and Technologies – in the first round, a doctoral student working on the topic: Smart Territorial Development in Latvia: the Concept and Nature was supported;
- developing and renewing research personnel (researchers) in the areas where the proportion of researchers aged 60 and over exceeds 25% (in our field of study, the number of researchers and leading researchers is 39, of which 22% are aged over 60);
- identifying and informing researchers about the opportunities offered by international networks for researcher training:
  - informative seminars are regularly held on the latest developments in international scientific cooperation programmes and projects;
  - cooperation agreements have been concluded (e.g. in the academic year 2017/2018, LLU has concluded 48 bilateral cooperation agreements with universities and research institutions of 22 countries, and LLU is a member of 39 international academic institution associations or networks);
- finding targeted cooperation partners abroad (including outside the EU), doing preparatory work for establishing and strengthening cooperation with selected universities and research institutions (international projects – ERA-NET, the ERDF, the Norwegian financial instrument, territorial cooperation projects, Nordplus, Erasmus +). Within this framework, good cooperation has been established with: Vytautas Magnus University; Klaipeda Science and Technology Park, the Estonian University of Life Sciences; Laurea University of Applied Sciences; University of Helsinki, the Ruralia Institute, Wageningen University; the Nordic Council of Ministers; Tallinn University of Applied Sciences;
- continuing establishing and developing cooperation between enterprises and researcher groups, addressing problems in research, technological development and innovation that are important for the development of enterprises and finding solutions to implementing joint projects and other initiatives:
  - participation in various exhibitions and seminars and the promotion of new products developed by scientists (e.g. Riga Food, Tech Industry, Agricultural Machinery. Farmstead. Forestry Machinery, Entrepreneur Days in Zemgale, contact establishment event Scientist. Entrepreneur. Cooperation and the forums Government Support for Businesses and Rural Area Days);
  - participation in cooperation and commissioned research contracts. Every year, several research investigations are commissioned, e.g. a Survey of Sampled Persons Crossing the Border commissioned by the CSB, the Identification of the Profile of Airport Passengers – by the State JSC Riga International Airport, an Active Youth Council to

Support Work with the Youth – by a local government, Training and Involvement of Forest Owners in the Management of Protected Areas – by the Latvian Environmental Protection Fund, Intellectual Services Relative to Preparing a Background Report on the Agricultural Innovation System of Latvia – by the OECD, an Assessment of Land Use Optimization Opportunities in Latvia in the Context of Climate Policy – by the JSC Latvian State Forests;

- designing and implementing a system that provides each LLU researcher with a financial opportunity to publish at least two scientific research papers in journals indexed by Scopus or Web of Science. This is sourced from research performance funding for individual research results and basic research funding for a particular organisational unit of LLU;

- involving private sector cooperation partners (businesses) – researchers – in the production of research papers. In the academic year 2017/2018, LLU produced 21 research papers in cooperation with private sector researchers, of which 13 research papers related to our field of study. Most of the research papers involved the participation of private entrepreneurs, as well as cooperation partners from the Latvian Rural Advisory and Training Centre (LLKC) and members of the Latvian Farmers Federation, the Latvian Agricultural Cooperatives Association, the agricultural services cooperative society LATRAPS and the Latvian Organic Farming Association;

- familiarising all LLU researchers, bachelor and master students with the rules and procedures of intellectual property management and knowledge commercialization and the potential of commercializable knowledge. TEPEK (https://www.llu.lv/lv/tehnologiju-un-zinasanu-parneses-nodala) is actively involved in explaining and popularising such issues. The LLU has developed and implemented the Intellectual Property Management Policy (https://www.llu.lv/sites/default/files/2018-01/Intelektu%C4%81l%C4%81%20%C4%ABpa%C5%A1uma%20p%C4%81rvaldes%20koncepcija.pdf) and the Regulations regarding Intellectual Property Management (https://www.llu.lv/sites/default/files/2018-01/LLU%20intelektu%C4%81l%C4%81%20%C4%ABpa%C5%A1uma%20p%C4%81rvald%C4%ABbas%20noteikumi.pdf).

- holding activities for cooperation between entrepreneurs and scientists (seminars, conferences, contact establishment events, training, joint thematic discussions on necessary knowledge and technologies and cooperation in their creation and implementation as well as the terms and conditions of their use and other activities facilitating knowledge transfer), international conferences Economic Science for Rural Development, Research for Rural Development and Bioeconomics and Rural Development. Representatives of scientific research institutions of the relevant branch of science, Ministry of Agriculture specialists, members of associations, business executives, and prospective specialists gather in the following annual scientific and practical conferences: Balanced Agriculture as well as Land Management and Surveying, while the international student conference Students on their Way to Science give an opportunity for students to show the results of their research.

Achieving the above-mentioned objectives make a positive impact on the international visibility of LLU, contribute to high-level research and allow making internationally recognized research findings. Progress in relation to the field of study leads to an increase in FTE positions, funding for scientific projects and the number of international research papers produced (indexed by SCOPUS and Web of Science) in the reporting period. For details, see Table 2.5 that shows expected and achieved research performance for 2018. Information on major achievements in the areas of social science could be found at: https://www.llu.lv/lv/nozimigakie-zinatnes-rezultati.

For the purpose of conducting and advancing fundamental research at LLU, an internal grant competition "Conducting Fundamental Research at LLU" has been developed and announced;

project proposals may be submitted to the competition by leading researchers elected at LLU or researchers with a doctor degree who, at the moment of submission of their proposals, have completed, still implement or have received approval for commencement of industrial (applied) research or an experimental project. The total funding of one research project is up to EUR 10 000, the implementation period – up to two years.

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.

Most of the teaching personnel engaged in the field of study perform the functions of both academic and research personnel; therefore, the latest and most important research findings are incorporated in the learning process, which is in line with one of the key principles of the Education Development Guidelines 2014-2020 – knowledge-based education for the society. In the reporting period, more than 10 various teaching aids and scientific monographs, containing the results of scientific projects, have been prepared by the teaching personnel engaged in the field of study and used in delivering courses. For example, the monograph entitled "Beyond a Century. The Smart Latvia" written by a team of authors under the national research programme Transformation of National Economy, Smart Growth, Governance and Legal Framework for Sustainable Development of State and Society – New Approaches to Creating a Sustainable Knowledge Society (EKOSOC-LV) (2014–2018), the monograph Knowledge Economy for the Viability of Rural Areas and Regions of Latvia produced within project 5.2.3 under the same programme, the monograph Possibilities to Reduce Greenhouse Gas Emissions by Climate-Friendly Agriculture and Forestry in Latvia produced within project 3.2 under the programme Value and Dynamic of Latvia's Ecosystems under Changing Climate (EVIDEnT) and the book Promoting Rural Entrepreneurship through the Production and Use of Medicinal Herbs produced within the Erasmus+ project Education in Rural Entrepreneurship through Producing and Valorising of Medicinal and Aromatic Plants (REMAP) (https://www.llu.lv/sites/default/files/files/lapas/M%C4%81c%C4%ABbu%20kursa%20programma_Iz gl%C4%ABto%C5%A1ana%20lauku%20uz%C5%86%C4%93m%C4%93jdarb%C4%ABb%C4%81%20 caur%20%C4%81rstniec%C4%ABbas%20un%20arom%C4%81tisko%20augu%20ra%C5%BEo%C5% A1anu%20un%20populariz%C4%93%C5%A1anu_2018.pdf).

The cross-border cooperation project Interreg LATLIT Ready for Business (ReforB) has developed methodological materials for business seminars and business games as well as developed an innovative and interactive tool Business Simulator (https://www.reforbsimulator.eu/).

The materials produced and experience built up within the Central Baltic project Meta Cluster for Attracting the Japanese Tourism Market are passed on to students as a practical example of tourism management, digital marketing, international communication (https://balticsea.countryholidays.info/).

To motivate teaching personnel to prepare teaching materials and incorporate the experience gained in projects and applied research into the learning process, LLU has established a motivation system – the preparation of teaching materials and the research dimension are the elements to be taken into consideration, and the teaching personnel are remunerated for them.

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.

The geographical location of LLU and the interaction of LLU with universities and research institutions in the world, including the Baltic Sea region, have led to the recognition of leading researchers engaged in the field of study and their research at European level, especially in the Baltic Sea region, as well as, to some extent, at world level. It is largely determined by niche research done within the field of study, which relates to smart development, bioeconomics, climate change, social innovation, economic and societal transformation and business development.

The main scientific research activities through which our leading researchers and researchers interact with the international scientific community are as follows:

- participation in COST actions (COST Action IS1207 Local Public Sector Reforms: An International Comparison; CA16123 – Safety Culture and Risk Management in Agriculture; CA16206 – Empowering the Next Generation of Social Enterprise Scholars; CA16106 – Ammonia and Greenhouse Gases Emissions from Animal Production Buildings);
- participation in Horizon2020 projects (BioMonitor, DISARM);
- participation in European Commission Erasmus + (KA2) programme projects (REMAP, ProFesus, CLICHA), which has contributed to the international transfer of experience and knowledge of the researchers, engaged in the field of study, in various parts of the world (Europe, Asia, Africa), resulting in a number of educational materials produced, public education activities held, interactive e-learning tools developed;
- participation in the project Meta Cluster for Attracting the Japanese Tourism Market (CAITO) under the Interreg Central Baltic Programme for 2014-2020 has encouraged researchers to cooperate with the tourism industry in identifying pathways to a competitive economy;
- participation in the project Ready for Business (ReforB) under the Interreg V-A Latvia-Lithuania Programme for 2014-2020, which resulted in contributing to sustainable business development in cross-border regions through innovative business support tools and solutions;
- participation in the ERA-NET network (RETHINK, SUMFOREST);
- research papers with a high citation impact factor, published in open access

In addition, the academic personnel engaged in field of study actively <u>participate in and are members of various international organisations</u>: 1) Association for European Life Science Universities (ICA); 2) Baltic Sea Region University Network (BSRUN); 3) Baltic Forestry, Veterinary and Agricultural University Network (BOVA); 4) European Rural Networks' Assembly; 5) European University Association (EUA); 6) International University Association (IUA); 7) Nordic Association of Agricultural Scientists (NJF); 8) Polish Council of Science; 9) Union of European Academies for Sciences applied to Agriculture, Food and Nature (UEAA); 10) European Academies' Science Advisory Council (EASAC); 11) Academy of Georgofili (Italy); 12) Russian Academy of Agricultural Sciences; 13) Lithuanian Academy of Sciences; 14) Royal Swedish Academy of Agriculture and Forestry; 15) Moroccan Association for the Improvement of the Quality of Education; 16) International Macromarketing Association; 17) European Association of Agricultural Economists (EAAE); 18) Athens Institute for Education and Research; 19) European Observatory on Homelessness; 20) European Association of Rural Sociologists; 21) Union of Scientists in Bulgaria; 22) German Association for Home Economics (Deutsche Gesellschaft für Hauswirtschaft); 23) International Federation for Home Economics.

The international recognition of the academic personnel engaged in the field of study is evidenced by: 1) their representation in scientific institutions of other countries as foreign experts (academic members of Russian State Agrarian University; Moscow Timiryazev Agricultural Academy, Vision Science Research in Malaysia); 2) invitations to be leading reporters and lecturers at conferences, discussions and symposia (Morocco, Turkmenistan, Belgium, France, Georgia); 3) being members of editorial boards of international journals (Journal of Science Education, International Journal of Globalisation and Small Business, European Integration Studies).

Future international cooperation focusing on the development of science is based on: 1) deeper incorporation of science and research into the learning process; 2) polarization of science and research, both internationally and nationally (through the website www.sciencelatvia.lv); 3) use of LLU internal grants to support new scientists and attract new scientists from abroad; 4) publication of research papers by master and doctoral students in international publications; 5) encouragement to prepare international project proposals by establishing a more targeted motivation system and using research performance funding.

Benefits from above mentioned cooperation for **all the programmes**: 1) materials created as a result of research projects – educational materials, educational activities, interactive e-learning tools – are created for the delivery of courses; 2) topics and problems are researched in-depth and are part of research project activities; 3) graduate papers and student research papers are purposefully and consistently linked with the learning process as well as science and research 4) involvement of students of all the levels in research and science (as target audiences, research team members and scientific research assistants).

The most important activities and cooperation **examples in the study programmes**: 1) students of the bachelor programme *Entrepreneurship and Business Management* and master students of the programme *Business Management* participated in a number of international projects as target audiences (ReforB; REMAP; EKOSOC-LV; CAITO); 2) master students of the master programme *Project Management* produced their master theses within particular research projects (Demo Mig); 3) some students have been involved in several research projects (Demo Mig; ActiveMomms) as researchers.

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 direction by providing examples and the summary of the quantitative data on the activities in the field of scientific research and/or artistic creation relevant to the study direction over the reporting period, for instance, the publications, participation in conferences, activities in the field of artistic creation, participation in projects by the academic staff members, etc., by listing the aforementioned according to the relevance.

In the period 2013-2018, the academic personnel engaged in delivering the programmes contained in the field of study implemented approximately 50 research projects. The most important **international projects** were those implemented within the European Union's 7th Framework Programme projects:

- *Enhancing of legumes growing in Europe through sustainable cropping for protein supply for food und feed (EUROLEGUME)* (2014-2017), which contributed to interdisciplinary and

interinstitutional research on innovative solutions regarding food and feed; it resulted in 7 research papers, indexed by Scopus and/or Web of Science, and initial activities for a postdoctoral project Assessment of the Bioeconomic Efficiency of Use of Legumes for Feed (2017-2020);

- in promoting international visibility and networking for LLU through leading the following two ERA-NET projects being important for the Latvian side: Rethinking the Links between Farm Modernization, Rural Development and Resilience in a World of Increasing Demands and Finite Resources (RETHINK) and Tackling the Challenges in Sustainable and Multifunctional Forestry through Enhanced Research Coordination for Policy Decisions (SUMFOREST); the most important result of both projects was the commencement of a new Horizon2020 project Disseminating Innovative Solutions for Antibiotic Resistance Management (DISARM) in 2019;
- in 2018, a large Horizon2020 project Monitoring the Bioeconomy (BioMonitor) was commenced; in the result, LLU SSC researchers cooperate with leading European scientific institutions (e.g. Wageningen University and Research, Thünen-Institute of Market Analysis, Technical University of Munich, European Forest Institute) and participate in developing a BioMonitor Model Toolbox.

In the reporting period, the teaching personnel engaged in the field of study were involved in several Erasmus + (KA2) projects of the European Commission, e.g. Education in Rural Entrepreneurship though Producing and Valorising of Medicinal and Aromatic Plants (REMAP)", "Climate Change in Agriculture (CLICHA), which has contributed to the international transfer of experience and knowledge of the researchers, engaged in the field of study, in various parts of the world (Europe, Asia, Africa), resulting in a number of educational materials produced, public educational activities held and interactive e-learning tools designed.

Cross - border cooperation programmes: the project Meta Cluster for Attracting the Japanese Tourism Market (CAITO) (2016-2020) under the Interreg Central Baltic Programme for 2014-2020 has encouraged researchers to cooperate with the tourism industry; the project Ready for Business (ReforB) (2017-2019) under the Interreg V-A Latvia-Lithuania Programme for 2014-2020, which resulted in contributing to sustainable business development in cross-border regions.

As regards the most important **national-level projects** and their results, it should be noted that the period from 2014 to 2018 marked very high research activity both in Latvia and among the teaching personnel engaged in the field of study. It was due to the research priorities approved by the government of the Republic of Latvia at the end of 2013, and national research programmes, in two of which the teaching personnel engaged in the field of study were involved, were subordinated to the priorities. The two programmes were as follows:

- Transformation of National Economy, Smart Growth, Governance and Legal Framework for Sustainable Development of State and Society – New Approaches to Creating a Sustainable Knowledge Society (EKOSOC-LV). Participation in the projects of this programme provided a great opportunity to increase the publication of research papers by academic personnel in internationally indexed journals or conference proceedings (ScienceDirect (Elsevier), Scopus, Thomson Reuter Web of Science (WoS), Springer Open, ERIH etc.). It also contributed to the acquisition of scientific degrees and the production of doctoral dissertations. National and international cooperation was activated, while also allowing the world-wide scientific community to be informed about the processes in Latvia. Overall, the programme has promoted progress in social sciences in Latvia in terms of interdisciplinarity. Implementing the projects of the national research programme determined that the teaching personnel engaged in the field of study would continue participating in two projects in the next period of the national research programme (2018-2021): INTERFRAME-LV and DemoMig;
- Value and Dynamic of Latvia's Ecosystems under Changing Climate (EVIDEnT). Participation

in the programme built up the competence of the teaching personnel engaged in the field of study in relation to climate change problems, assessment of possibilities to reduce greenhouse gas (GHG) emissions. Taken together, the research results made a significant contribution to the current scientific research on GHG emissions from the agricultural sector (there were produced: one scientific monograph, two research papers for journals, 11 research papers for conference proceedings indexed by Scopus, Thomson Reuter Web of Science (WoS), one popular science article; the personnel participated in 18 international scientific conferences; one master thesis and one doctoral dissertation on the relevant research problem were defended). The research programme made forecasts of GHG emissions, analysed in more detail the main sources of GHG emissions and the main emission factors, made new findings on GHG emission reduction measures suitable for Latvia and their economic and environmental benefits, as well as established international contacts and developed a project proposal (Climate Care Cattle Farming Systems (CCCFarming)) for the Horizon2020 programme to continue the research at international level; the proposal was approved at the end of 2019 and the project was commenced.

Research investigations commissioned by the Ministry of Agriculture, which focus on particular government policies and achieving particular economic targets, considerably contribute to the research competence of the teaching personnel engaged in the field of study. For example, the project Incorporating Carbon Sequestration and Accumulation in Arable Land, Permanent Grasslands and Wetlands in Marginal Abatement Cost Curves (MACC) for Agricultural Greenhouse Gas Emissions in Latvia is important for shaping agricultural, environmental and climate policies, and its results were used in designing the National Energy and Climate Plan 2021-2030. The project Forecasting Agricultural Development and Developing Policy Scenarios for 2050 created two models; the models are mostly intended for use by LLU, the Ministry of Agriculture and the Ministry of Environmental Protection and Regional Development.

LLU has a system in place that accurately prescribes the use of basic funding, redistributing a certain amount of it to the organisational units (depending on their performance); each researcher receives remuneration for individual research performance, the amount of which depends directly on his/her research performance.

To increase the research capacity of LLU and to encourage the involvement of new scientists, an internal grant programme Implementation of the LLU Research Programme has been established, thereby funding projects on a competitive basis.

To contribute to the development of new projects, a project Promotion of International Cooperation Projects in Research and Innovation at LLU and the Supervised Research Institutions is being implemented from 2018 to 2022. The project provides funding for preparing and submitting project proposals. For example, a project proposal Coaching for Innovation – Competence Development of Advisors in the Agri-food and Forestry Sector (COACHINN) being above the quality threshold for Horizon2020 was not approved; it could be improved and submitted repeatedly if funding were available. The performance of the teaching personnel engaged in the field of study demonstrates a constant increase in the number of FTE researchers employed, the amount of research project funding and the number of international research papers produced (indexed by SCOPUS and Web of Science) in the reporting period.

The research activities of academic personnel are summarized both in the Strategy of the Faculty and in annual reports on research performance. Any information on research papers, projects and other scientific research activities is collected in the electronic database of the LLU information system.

Kind/level of publications	Number				Number in reporting period
	A(4)	B(3)	C(2)	D(1)	
Peer-reviewed scientific and other monographs	0	0	6	18	24
Research reports produced by third persons	0	7	19	12	38
Research papers in journals	4	56	76	6	142
Research papers in scientific proceedings, chapters in collective monographs, editorial introductions to monographs and collections	2	8	34	72	116
Conference reports or abstracts	359	132	37	269	797
Papers in encyclopaedias and section publications	0	3	0	0	3
Teaching and methodological aids and popular science articles	12	3	39	2	56
Published peer-reviews and speeches, journalism	0	0	2	15	17
Scientific peer-reviewed proceedings	0	1	5	0	6
Doctoral dissertations (defended)	0	0	0	11	11
Research projects					47

Detailed data on academic personnel's involvement in research projects and research as well as their research performance are available in the academic personnel's CVs.

4.5. Specify how the involvement of the students in scientific 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 direction in scientific research and/or artistic creation activities by giving examples of the opportunities offered to and used by the students.

Involving students in research is important for increasing the research capacity of the field of study, yet due to limited financial resources, the students' involvement in research has so far taken the form of voluntary work (in the period 2013-2018, voluntary work contracts have been concluded with 13 students) or they worked as assistants to leading researchers (four contracts). Over the last 6 years, 9 master theses were produced within a research project (EKOSOC-LV).

The teaching personnel engaged in the field of study have an opportunity to use the LLU internal grant programmes Implementation of the LLU Research Programme and Strengthening Scientific Research Capacity at LLU; the programmes aim to promote the involvement of master students, doctoral students and new scientists in scientific research, and since 2017, eight doctoral students and their scientific supervisors have been involved in these programmes.

To stimulate students' interest in science, various student scientific conferences are held every year, e.g. the international student scientific conference Students on their Way to Science, the master student scientific conference Development in Diversity, for which the students, together with their supervisors, prepare their scientific research papers. The research papers of the best master students, in cooperation with their supervisors, are enhanced and submitted to international scientific conferences or to scientific publications for publication.

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 study direction subject to the assessment, by giving the respective examples and assessing their impact on the study process.

The teaching personnel and some organisational units of LLU engaged in the field of study implement a number of activities that promote the introduction of various forms of innovation in the learning process. For example, ***technological and cooperation innovations*** are implemented at the LLU Technology and Knowledge Transfer Division (TEPEK); its purpose is to foster cooperation among scientists, students and entrepreneurs through the development of innovative technological solutions and high value-added products based on scientific research and interdisciplinary cooperation between scientists and students. TEPEK holds networking and creativity activities, brainstorming and approbation masterclasses, as well as seminars and workshops on intellectual property protection. One of the priorities is to form and strengthen links between students of various disciplines by developing innovative solutions in the fields of studies and science represented by LLU.

Social, strategic, cooperative and value-focused innovations are implemented in summer schools organised by the teaching personnel engaged in the field of study. Each summer school has its own theme, purpose and objectives. For example, the 2017 summer school called Building a Community. Its Social, Economic and Cultural Aspects in Practice was held in Kaldabrunas, Rubene parish, Jekabpils municipality. The school was held in cooperation with the local association Udenszimes (Watermarks) and gathered students from various programmes delivered by ESAF. The activities involved theoretical workshops on community building and local resources, as well as practical use of various social research methods. As a result, students presented their vision for the future development of that place. The 2019 summer school, however, called What to do with the Place? was held in Aizkalne parish, Preili municipality, and was organised in cooperation with the local association Public Centre Aizkalne and was part of the national research programme project DemoMig; it gathered bachelor and master students from various LLU Faculties (ESAF, the Faculty of Veterinary Medicine and the Faculty of Environment and Civil Engineering), as well as various universities of Latvia (LLU and the University of Latvia), thereby allowing for an interdisciplinary view of on-site development scenarios. In view of the wide repercussions of a summer school and the range of participants involved, the summer school is seen as a successful social innovation.

Management, planning, marketing and organizational innovations are implemented at an annual event Entrepreneur DNA initiated and supervised by the teaching personnel engaged in the field of study, yet the event is organised by students themselves. The event is aimed at developing entrepreneurial ability in students. Students are fully responsible for planning and conducting the event, the students themselves choose guests for the event, invite them, find sponsors, moderate the event, shape the event format and arrange rooms for the event. In the academic year 2018/2019, for instance, representatives of 11 various companies and national institutions and 120 students took part in the event; 9 masterclasses were delivered and contact establishment was possible. The event provided students with an opportunity to see the products developed by entrepreneurs and hold discussions and group work. In the event, students gained a new knowledge of the business environment, how to start and manage a business, business ethics and etiquette, as well as professional skills in leadership, marketing, planning, event planning, fundraising, teamwork, time management, negotiation, as well as delegation and assumption of responsibilities.

Product, service and business model innovations are promoted through student involvement in business idea competitions held by municipalities, business organisations, associations and national institutions. In 2017, for instance, the students of the field of study participated in a business idea competition We Create for our Municipality, held by the association We Create for our Municipality in cooperation with DELFI; the purpose was to create as much socio-economic benefit as possible for some municipality of Latvia. The student team Thinking for Tomorrow generated ideas for seven business pathways, beginning with gift service trough to games for tourists, which they would like to implement in Jelgava municipality. The competition gave students an opportunity to prove themselves as talented and enterprising Latvian youth who develop and implement various business projects in the municipalities of Latvia.

Within an ESAF project (ReforB), an IT tool Business Simulation Game was designed; it could be used in courses (e.g. Entrepreneurship, Basics of Entrepreneurship) as an innovative and attractive business idea development tool (www.reforbsimulator.eu).

II - Description of the Study Direction (5. Cooperation and Internationalisation)

5.1. Provide the assessment as to how the cooperation with different institutions from Latvia and abroad (higher education institutions/ colleges, employers, employers' organisations, municipalities, non-governmental organisations, scientific institutes, etc.) within the study direction contributes to the achievement of the aims and learning outcomes of the study direction. Specify the criteria by which the cooperation partners suitable for the study direction 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 employers.

Cooperation with national institutions in relation to the field of study occurs in several ways:

- cooperation with non-governmental organisations for dissemination of project results and communication with the public (e.g. the Farmers Parliament, the Latvian Agricultural Organisation Cooperation Council, the Latvian Agricultural Cooperatives Association);
- participation in executive and supervisory boards of non-governmental organisations and companies (e.g. the Latvian Chamber of Commerce and Industry, the Jelgava Business Incubator);
- joint research papers and popular science articles with industry experts (e.g. precision agricultural technology company Precision Farming Ltd);
- research contracts commissioned by municipalities (e.g. the municipalities of Jelgava, Ogre and Auce);
- research contracts commissioned by employers and the involvement of employers in the learning process and research (e.g. ZAAO Ltd, Accenture OY, the Latvian Peat Producer Association, the SJSC Latvian State Forests);
- involvement in the Doctoral Councils of other universities (e.g. the professors engaged in the field of study are members of the Doctoral Council of Daugavpils University, the University of Latvia Doctoral Council for Economics, the Joint Doctoral Council for Management Science of RISEBA, Ventspils University College and the BA School of Business and Finance, the Doctoral Council of Turiba University and the Doctoral Council for Sociology of Riga Stradins

University);

- cooperation with other universities and colleges (the Transport and Telecommunication Institute; Aeres University of Applied Sciences; the West University of Timisoara; Slovak University of Agriculture);
- cooperation in provision of information services and mutual promotion of use of information resources and development of interdisciplinary research (the University of Latvia Academic Library, TILDE Ltd, Forest and Wood Products Research and Development Institute Ltd);
- cooperation in provision of work placements and organisation of practical training as prescribed in the curricula of relevant programmes (the Latvian Peat Producer Association, the JSC Jelgavas Dzirnavas (Jelgava Mill), the State Revenue Service etc.).

For cooperation **with foreign institutions**, LLU has developed and implemented an Internationalization Plan, which defines the goals, priorities and performance targets of LLU's international cooperation in the areas of student exchange, full-time studies for foreigners and living conditions for foreigners. The Internationalization Plan defines the following key priorities and cooperation activities:

- priority cooperation with higher education institutions of similar study and research profile in the EU Member States and partner countries, whose fields of study correspond to those implemented by LLU;
- priority cooperation with the international associations of universities in which LLU is an active member – the European Association of Life Sciences Universities (ICA), the Baltic University Programme (BUP), the Baltic-Nordic Agricultural University Network (BOVA - NOVA), the Nordic Agricultural Scientists Association (NJF), etc. and that pursue their academic activities in similar fields of studies and research;
- international cooperation with foreign universities/colleges at the level of fields of study, focusing on foreign partner universities/universities with regular exchange of students and lecturers (Erasmus + programme, etc.), as well as participation in joint projects (e.g. SSO 8.2.3), research, mutual cooperation in scientific and methodological conferences, etc.

Details on the universities/higher education institutions which LLU has concluded Erasmus + interinstitutional agreements with are available at: https://www.llu.lv/sites/default/files/2018-10/LLU%20ligumi%20_Erasmus%2B%20partneraugstskolas_HEIs%2027.03.18.xls.

Information on cooperation agreements is available in Annex 7.

The areas of cooperation with employers and the mechanism for involving employers are described in more detail in sections 2.1 and 2.2., while cooperation in science is described in section 4.6.

More specific examples of cooperation and the mechanism for involving employers are given in section 2.2 of the description and description of each program. and sections 2.3

5.2. Specify the system or mechanisms, which are used to attract the students and the teaching staff from abroad and provide a description of the dynamics of the number of the attracted students and the teaching staff.

To **attract foreign students**, LLU provides information on the programmes it delivers, which is

available on the website (see Part II, Chapter 3, sub-paragraph 3.3.). LLU implements various marketing strategies to attract foreign students: LLU concludes contracts with recruitment agents whose work efficiency is assessed afterwards; e-marketing, participation in international educational fairs and agent forums, etc. LLU is a member of the Latvian Higher Education Export Association (AIEA) and participates in its activities. **Foreign work placements** are funded through Erasmus + mobility projects on a case-by-case basis. The attraction of foreign teaching personnel to the field of study is mainly based on the activities of the International Week at ESAF, during which 13 visiting teaching personnel delivered their lectures in 2018 (9 in 2017, 17 in 2016, 9 in 2015, 9 in 2014 and 7 in 2013).

Table 2.9.

Visiting teaching personnel who delivered their lectures at the International Week in 2018

Visiting lecturer	Country	Institution
Melinda Dinca	Romania	West University of Timisoara
Jona Mulliri	Albania	Agricultural University of Tirana
Edmira Shahu	Albania	Agricultural University of Tirana
Istvan Boros	UK	University of Cambridge
Maria Parlinska	Poland	Warsaw University of Life Sciences
Barbara Freytag-Leyer	Germany	Fulda University
Ludwik Wicki	Poland	Warsaw University of Life Sciences
Karina Tetek Benetti	Czechia	Technical University of Liberec
Janusz Myszcsyszyn	Poland	West Pomeranian University of Technology
Agnieszka Parlinska	Poland	Warsaw University of Life Sciences
Ewa Stawicka	Poland	Warsaw University of Life Sciences
Tiberiu Foris	Romania	Transylvania University
Diana Foris	Romania	Transylvania University

To solve the problem of limited funding for foreign teaching personnel, a project Development of Academic Personnel at LLU was launched with the support of the European Social Fund (8.2.2.0/18/A/014). One of its objectives is to attract foreign academic personnel by 2021 by providing them with extra funding. The project announces international competitions for academic positions and creates opportunities for sharing experience and mutually enhancing courses and methodology and the way of teaching. Teaching personnel are attracted as visiting lecturers not for delivering a few lectures but for delivering a whole course. For example, after announcing an international competition for an academic position in March 2019 (for a period of 6 months), a

visiting professor from Poland was employed by ESAF.

5.3. In the event that the study programme entails a traineeship, provide a description of the traineeship options offered to the students, as well as the provision, and work organisation. Specify whether the higher education institution/ college provides assistance in finding traineeships.

Students are free to choose their work placements. Programme directors or the teaching personnel responsible for organising work placement (hereinafter – practice supervisors) provide assistance in finding a work placement.

Every year, ESAF receives several work placement offers from its <u>long-term partners,</u> e.g. DINEX Latvia Ltd, Accenture Latvia Ltd, JSC Swedbank, JSC SEB banka, Jelgavas Tipogrāfija Ltd. etc. Information about work placement opportunities are available to students on the notice board, on the informative TV set at ESAF, on the ESAF website, and students are also informed by their programme directors or practice supervisors. Every year, some of the cooperation partners organise guest lectures for students, during which they inform students about work placement and job opportunities, e.g. Nikos Travel Ltd – about work placement opportunities in Cyprus, Accenture Latvia Ltd – about work placement opportunities in the company, Civitta Latvia – about cross-border exchange programmes for entrepreneurs and job opportunities within the company. <u>ESAF has concluded agreements on providing work placement opportunities and on cooperation with several organisations</u> (see Annex 10). Of the enterprises and institutions listed in Annex 10, the Latvian Rural Advisory and Training Centre (as well as its offices in the regions), the agricultural services cooperative society LATRAPS, the Jelgava City Council and the Administration of Zemgale Planning Region offer the most work placements for students. Students regularly take advantage of traineeship opportunities in the mentioned organizations. During the reporting period, students made less use of internship opportunities - prakse.lv and the opportunities offered by the RTU Development Fund.

Students also have an opportunity to take practical training abroad within the ERASMUS + programme (https://www.llu.lv/lv/erasmus-prakse) in some of the Erasmus + programme countries, both during their studies and during the year following their graduation. Students mostly themselves look for work placements abroad. If a work placement offer has been received from an LLU foreign cooperation partner, the LLU International Cooperation Centre electronically transfers the information to programme directors whose duty is to inform the programme's students about the opportunities for work placement abroad.

Work placement offers for students are also available on the <u>LLU website in the section Job and Work Placement Offers</u> (https://www.llu.lv/lv/darba_piedavajumi/view_practice).

Students can also take advantage of the opportunities offered on the website for work placements (https://www.prakse.lv/) and take part in competitions for work placements. LLU in cooperation with the foundation Riga Technical University Development Fund (https://www.rtu.lv/lv/attistibasfonds/aktualie-konkursi) offers students an opportunity to participate in open competitions and get paid work placements in various domestic and foreign companies operating in Latvia, e.g. Severstal Distribution Ltd, Skonto Plan LTD, MSC Shared Service Centre Riga Ltd, Kurbads un Ko, Tele2 Ltd, AB SALDO Ltd, PricewaterhouseCoopers Ltd, Deloitte Audits Latvia Ltd etc.

Students are also offered an opportunity to take practical training at relevant LLU organisational units, e.g. the Communication and Marketing Centre, the Technology and Knowledge Transfer Division, the Resource Accounting Centre, the Financial Planning Centre, etc.

Programme directors and the teaching personnel responsible for organising work placement inform students about the opportunities for work placement offered by LLU and ESAF. Updated information on work placement offers is also posted on the e-studies platform or on the ESAF website, as well as sent electronically to students.

In the field of study, practical training is implemented in accordance with Cabinet regulation No. 141 of 20 March 2001 Regulations regarding the National Standard for First Level Professional Higher Education, Cabinet regulation No. 512 of 26 August 2014 Regulations regarding the National Standard for Second Level Professional Higher Education, the LLU Statute on Studies, Senate decision No. 8-30 of 12 November 2014 Latvian University of Life Sciences and Technologies Traineeship Regulation (available at: https://www.llu.lv/lv/studiju-prakses), the ESAF Guidelines for Organising Work Placement (ESAF Board decision of 18 April 2018) (available at: http://www.esaf.llu.lv/sites/esaf/files/2018-04/Prakses_vadl%C4%ABnijas.pdf) as well as the curriculum of practice (available at: http://www.esaf.llu.lv/lv/studiju-un-reglamentejosie-dokumenti).

Practical training is taken during a semester, in which no classes or individual studies and examinations are planned. It is supervised and coordinated by a teaching personnel member – the practice supervisor – who is approved the institute director. One week before the beginning of work placement, the practice supervisor submits an application for placing the student on work placement to the Dean Office.

A student selects his/her work placement him/herself in order to meet the requirements of the curriculum of practice, which has to be approved by the practice supervisor, and a traineeship agreement has to be concluded. The compliance of the hosting organisation with the requirements of the curriculum of practice is assessed by the practice supervisor.

Before placing a student on work placement, the dean's decision is issued and a traineeship agreement is made among LLU, the student and the hosting organisation (available at: https://www.llu.lv/lv/studiju-prakses).

If a student takes practical training outside Latvia, the dean's decision and a traineeship agreement are prepared in English (available at: https://www.llu.lv/lv/studiju-prakses). Documentation and the rector's decision on placing students on work placement are prepared by the LLU International Cooperation Centre in accordance with the terms and conditions of international exchange programmes and inter-university and other agreements.

A trainee has two supervisors: the practice supervisor who is appointed by the relevant institute, which organises work placement as well as coordinates and controls the process of work placement, and the other is the work placement supervisor who guides and advises the trainee in accordance with the requirements of the curriculum of practice. During the work placement, the trainee regularly communicates with the practice supervisor in order to ensure the objectives of work placement are achieved.

If a student changes the hosting organisation, the responsible person of ESAF prepares a new dean decision regarding changes in the previous decision based on the student's application for change of the hosting organisation. The practice supervisor draws up a new traineeship agreement.

During the work placement, the trainee prepares a practice report as required by the curriculum of practice and submits it together with the work placement supervisor's reference to the institute responsible for organising work placement. The practice report is defended by the student and

assessed by a committee, which also includes the practice supervisor, approved by the director of the institute.

5.4. In the event that joint study programmes are implemented in the study direction, provide the justification of the creation of the joint study programmes and a description and assessment of the selection of the partnering higher education institutions by including information on the principles and the procedures for the creation and implementation of these joint study programmes. In the event that no joint study programmes are implemented in the study direction, provide a description and assessment of the plans of the higher education institution/ college for the creation of such study programmes within the study direction.

The mission of the joint academic master programme Agri-food Business Management developed in 2017 by Latvia University of Life Sciences and Technologies (LLU), the Estonian University of Life Sciences (EMU) and Vytautas Magnus University (VMU) (Lithuania) is to provide an in-depth knowledge of the agro-food industry and environmental principles, thereby contributing to graduate careers in multinational companies. The programme focuses on the interdisciplinarity of three closely interrelated sciences and disciplines – agriculture, food production and management science. The urgency of developing such a programme was determined by the fact that modern companies need managers who can independently analyse, plan and manage agri-food business functions from the perspective of the primary and secondary sectors, making complex decisions on international business and having knowledge of managing agro-food business processes and developing innovative products. The necessity for the programme is also justified by the priorities set by the European Union – to ensure economically viable food production and stable food supply, while also meeting the requirements of food safety as well as taking into account the rural economy, animal welfare and social and environmental issues. For small and open economies such as Latvia, Lithuania and Estonia, sustainable economic growth and competitive exports are key drivers for achieving the priorities set. However, without active regional cooperation, integration, networking and innovation, this is difficult to achieve.

The choice of partner universities – EMU and VMU – involved in delivering the joint master programme by LLU was determined by close cooperation with these universities within the university network BOVA since 1996. One of the main goals of BOVA was to cooperate on strategic development directions and joint master and doctoral programmes, which provided opportunities to develop and strengthen cooperation with leading universities in the Baltic States, contributing to the exchange of experience and the generation of new common ideas. Given the need for closer cooperation among the three Baltic States, this joint master programme was developed, and its implementation is proof of sustainability and successful cooperation within the BOVA network for 21 years. The joint master programme Agri-food Business Management, which is implemented in English, is a new and unique programme not only in the Baltic States but also in Europe, as no joint programme has so far focused on training professionals and managers in agri-food business.

LLU master students enrolled on the joint programme take first-semester courses in Estonia, the second semester is organised in Lithuania and the third semester – in Latvia, which is followed by the last semester for production and defence of a master thesis.

The Estonian University of Life Sciences (EMU), as a partner university of LLU for the joint master programme, is the only university in Estonia whose priorities in academic and research activity are

focused on sustainable development of natural resources. EMU is the fourth largest university in Estonia in terms of number of students and is responsible for research and development in the field of sustainable use of natural resources and in the areas related to rural development and the rural economy. EMU promotes cooperation and research in six key areas: agriculture, environmental science, forestry, food and health, engineering and technology as well as rural economics. The second LLU partner university – Vytautas Magnus University (VMU) - is the only state higher education and research institution in Lithuania that delivers bachelor, master and doctoral programmes in the fields of food science, agriculture, forestry, water and land management, bioenergy and mechanical engineering, climate change and sustainable use of natural resources. Accordingly, the partner universities selected by LLU have the necessary resources and expertise to implement the joint master programme designed for the specifics of business management in agriculture and food production.

A joint Programme Committee, which consists of programme directors from all the three partner universities, employers from the agricultural and/or food sectors as well as a representative appointed by the programme's students, has also been established to continuously and systematically ensure, organise and monitor progress in student learning, the quality and methodological aspects of the joint master programme and the defence of master theses.

The specifics of the joint master programme are in line with trends in the European Higher Education Area, as the leading universities of the three Baltic States, based on their close international cooperation, are able to attract students and teaching personnel from both Europe and the rest of the world.

II - Description of the Study Direction (6. Implementation of the Recommendations Received During the Previous Assessment Procedures)

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 direction, 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 direction and the relevant study programmes.

The recommendations given by the experts for the previous accreditation of the field of study have been implemented (see Annex 11), thereby ensuring the enhancement of both the field of study and the programmes contained therein and raising the quality of studies. Some of the recommendations given by the experts were included as performance indicators in the ESAF Operational Plan for implementing the LLU Development Strategy 2015-2020, thereby providing a basis for a continuous enhancement process.

6.2. Implementation of the recommendations given by the experts during the evaluation of the changes to the relevant study programmes in the respective study direction or licensed study programmes over the reporting period or recommendations received during the procedure for the inclusion of the study programme in the accreditation form of the

study direction (if applicable).

On 19 September 2017 master's study programme "Agri-food Business Management" received a positive evaluation from the Licensing Commission experts granting a license to the programme. The experts had specified a few short-term tasks, which have already been implemented before opening of the study programme, and two recommendations for the long-term development of the programme. The two long-term recommendations have been taken into consideration and their implementation currently is in the process. The recommendations are described in more detail in Annex 11 also specifying LLU activities, deliverable targets and deadlines.

Annexes

I. Information on the Higher Education Institution/ College		
List of the governing regulatory enactments and regulations of the higher education institution/ college	Annex_1.docx	1.pielikums.docx
Information on the implementation of the study direction in the branches of the higher education institution/ college (if applicable)		
Management structure of the higher education institution/ college	Annex_2.docx	2.pielikums.docx
II. Description of the Study Direction - 1. Management of the Study Direction		
Plan for the development of the study direction (if applicable)	Annex_3.docx	3.pielikums.docx
Management structure of the study direction	Annex_4.docx	4.pielikums.docx
II. Description of the Study Direction - 3. Resources and Provision of the Study Direction		
Basic information on the teaching staff involved in the implementation of the study direction	Annex_5_1.xlsx	5_1. pielikums.xlsx
Biographies of the teaching staff members (in Europass Curriculum Vitae format)	Europass.ENG.rar	Europass.LV.rar
Summary of the statistical data on the incoming and outgoing mobility of the teaching staff over the reporting period	Annex_5_2.docx	5_2. pielikums.docx
II. Description of the Study Direction - 4. Scientific Research and Artistic Creation		
List of the publications, patents, and artistic creations of the teaching staff over the reporting period	Annex_6.rar	6. pielikums.rar
II. Description of the Study Direction - 5. Cooperation and Internationalisation		
List of cooperation agreements	Annex_7.xlsx	7. pielikums.xlsx
Statistical data on the teaching staff and the students from abroad	Annex_8.docx	8.pielikums.docx
Statistical data on the mobility of students (by specifying the study programmes)	Annex_9.docx	9.pielikums.docx
Description of the organisation of the traineeship of the students	Annex_10.A.rar	10.A. pielikums.rar
Information on the agreements and other documents confirming the traineeship of the students in companies	Annex_10.xlsx	10. pielikums.xlsx
II. Description of the Study Direction - 6. Implementation of the Recommendations Received During the Previous Assessment Procedures		
Overview of the implementation of the provided recommendations	Annex_11.doc	11. pielikums.doc
Description of the Study Programme - Other mandatory attachments		
Confirmation signed by the rector, director or the head of the study programme or the study direction of the higher education institution/ college which states that the official language proficiency of the teaching staff involved in the implementation of the relevant study programmes of the study direction complies with the regulations on the level of the official language knowledge and the procedures for testing official language proficiency for performing professional duties and office duties.	LLU_apliecinajumi_Vadibas_virziens_EN .docx	LLU_apliecinajumi_Vadibas_virziens.edoc
III. Description of the Study Programme - 1. Indicators Describing the Study Programme		
Compliance of the joint study programme with the provisions of the Law on Institutions of Higher Education (table)		
Statistics on the students over the reporting period		
III. Description of the Study Programme - 2. The Content of Studies and Implementation Thereof		
Compliance of 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 (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		
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 Study Direction - Other mandatory attachments		
Sample of the diploma to be issued for the acquisition of the study programme.		
Description of the Study Programme - Other mandatory attachments		
Document confirming that the higher education institution/ college will provide the students with the options to continue the acquisition of education in another study programme or at another higher education institution/ college (a contract with another accredited higher education institution/ college), in case the implementation of the study programme is discontinued		
Document confirming that the higher education institution/ college guarantees to the students a compensation for losses if the study programme is not accredited or the licence of the study programme is revoked due to the actions of the higher education institution/ college (actions or failure to act) and the student does not wish to continue the studies in another study programme		
Confirmation of the higher education institution/ college that the teaching staff members to be involved in the implementation of the study programme have at least B2-level knowledge of a related foreign language according to European language levels (see the levels under www.europass.lv), if the study programme or any part thereof is to be implemented in a foreign language.		
If the study programmes in the study direction subject to the assessment are doctoral study programmes, a confirmation that at least five teaching staff members with doctoral degree are among the academic staff of a doctoral study programme, at least three of which are experts approved by the Latvian Science Council in the respective field or sub-field of science, in which the study programme has intended to award a scientific degree.		
If academic study programmes are implemented within the study direction, a document confirming that the academic staff of the academic study programme complies with the provisions set out in Section 55, Paragraph one, Clause three of the Law on Institutions of Higher Education		
Sample (or samples) of the study agreement		
If academic study programmes for less than 250 full-time students are implemented within the study direction, the opinion of the Council for Higher Education shall be attached in compliance with Section 55, Paragraph two of the Law on Institutions of Higher Education.		
Description of the Study Direction - Other mandatory attachments		
Electronically signed application form for assessment of a study direction	Vadibas_virziena_iesniegums_EN.docx	Vadibas_virziena_iesniegums.edoc

Other annexes

Name of document	Document
LLU galvenie ieksejie normativie akti un regulejumi.rar	LLU galvenie ieksejie normativie akti un regulejumi.rar
Main internal legal acts and regulations.rar	Main internal legal acts and regulations.rar
4. pielikums.docx	4. pielikums.docx
Annex_4.docx	Annex_4.docx

Business Management

Title of the higher education institution	*Management, Administration and Management of Real Property*
ProcedureStudyProgram.Name	*Business Management*
Education classification code	*47345*
Type of the study programme	*Professional master study programme*
Name of the study programme director	*Andra*
Surname of the study programme director	*Zvirbule*
E-mail of the study programme director	*andra.zvirbule@llu.lv*
Title of the study programme director	*Dr.oec*
Phone of the study programme director	*63025170*
Goal of the study programme	*To provide the in-depth knowledge and interdisciplinary skills necessary for high-level management at companies (organizations) in current global environment in diverse economic sectors.*
Tasks of the study programme	*☐ To develop knowledge and understanding of resources necessary for entrepreneurship, their place and role in the national economy in interaction with the business environment with the focus on the regional context and the context of bioeconomy;* *☐ enrich knowledge and develop professional skills for management and business processes within companies and organizations, including global processes;* *☐ To develop and strengthen research skills based on quantitative and qualitative scientific research methods, take into consideration environmental aspects, interests of society and ethical responsibility.*

Results of the study programme	*Knowledge:*
	Students know and understand the nature of the national economy, resource management and economic systems, their impact on the business environment and importance at regional, national and global levels;
	Students have extended conceptual knowledge of management processes in organizations, business processes in companies and factors that influence decisions of business management and development.
	Skills:
	Professional skills
	Students are able to use and conduct in-depth analysis of existing theories, apply methods and process management skills to independently work on complex or systematic business (organizations) management issues;
	Students are able to find and use information to perform business (organizations) management tasks and / or conduct specialized research, as well as explain and discuss the decisions or development projects under supervision and in accordance with current research and ethical standarts.
	Soft skills
	Students are able to communicate and collaborate with professionals and the general public on professional issues, strategies and policies in accordance with the objectives set for tasks;
	Students have skills to work not only as a team member, but also to take a leadership role in communicating an idea to the local as well as international audience.
	Competence:
	Students are able to define and critically analyze problems and challenges in entrepreneurship and business activities of organizations, to justify their solutions, carry out additional analysis, if necessary, taking into account resource constraints, stakeholder interests and sustainability considerations;
	Students are able to integrate knowledge of various fields for effective operation of a company (organization) according to the goals by applying creative and innovative approach and / or solving problem situations in management process.
Final examination upon the completion of the study programme	*Master thesis*

Study programme forms

Full time studies - 1 years, 6 months - latvian

Study type and form	*Full time studies*
Duration in full years	*1*
Duration in month	*6*
Language	*latvian*
Amount (CP)	*60*

Admission requirements (in English)	*Professional Bachelor's degree or second level professional higher education*
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	*Professional Master's degree in business management (MBA)*
Qualification to be obtained (in english)	

Places of implementation

Place name	City	Address
Latvia University of Life Sciences and Technologies	JELGAVA	LIELĀ IELA 2, JELGAVA, LV-3001

Full time studies - 2 years - latvian

Study type and form	*Full time studies*
Duration in full years	*2*
Duration in month	*0*
Language	*latvian*
Amount (CP)	*80*
Admission requirements (in English)	*An academic Bachelor's degree or higher professional education*
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	*Professional Master's degree in business management (MBA)*
Qualification to be obtained (in english)	*General Manager of Organizations*

Places of implementation

Place name	City	Address
Latvia University of Life Sciences and Technologies	JELGAVA	LIELĀ IELA 2, JELGAVA, LV-3001

Full time studies - 1 years, 6 months - english

Study type and form	*Full time studies*
Duration in full years	*1*
Duration in month	*6*
Language	*english*
Amount (CP)	*60*
Admission requirements (in English)	*Professional Bachelor's degree or second level professional higher education At least B2 level of English language skills*
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	*Professional Master's degree in business management (MBA)*
Qualification to be obtained (in english)	

Places of implementation

Place name	City	Address
Latvia University of Life Sciences and Technologies	JELGAVA	LIELĀ IELA 2, JELGAVA, LV-3001

Full time studies - 2 years - english

Study type and form	*Full time studies*
Duration in full years	*2*
Duration in month	*0*

Language	*english*
Amount (CP)	*80*
Admission requirements (in English)	*An academic Bachelor's degree or higher professional education At least B2 level of English language skills*
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	*Professional Master's degree in business management (MBA)*
Qualification to be obtained (in english)	*General Manager of Organizations*

Places of implementation

Place name	City	Address
Latvia University of Life Sciences and Technologies	JELGAVA	LIELĀ IELA 2, JELGAVA, LV-3001

III - DESCRIPTION OF THE STUDY PROGRAMME (1. Indicators Describing the Study Programme)

1.1. Description and analysis of changes in study programme parameters that have taken place since the issue of the previous accreditation certificate of study direction or the license of study programme if study programme is not included in the accreditation page of the study direction

In the period since the previous accreditation, the following changes have been made in the parameters of the programme:

1. In accordance with LLU strategy and developing international dimension, from 2016/2017. academic year study program conducted **in English**. The development of the internationalization of the study program was also recommended in the previous accreditation.

2. The professional qualification - **General Manager of Organizations** - was specified in accordance with the accepted professional standard (Agreed at the meeting of the National Centre for Education in co-operation with the Tripartite Cooperation sub-council of Vocational Education and Employment, 18.09.2019, Protocol No 6).

1.2. Analysis and assessment of the 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 in the different study forms, types, and languages.

The study programme in the time period from 2013/2014 to 2018/2019 has purposefully and firmly established its positions in the direction of management science (Annex_13_ Statistical data of the students of the study programme) owing to the following reasons:

- A steady increase in the number of students. In the time period 2013-2019, the number of students has increased by 1.85, times which may be explained *) by the admission of foreign students in the programme starting from 2016/2017 academic year; *) allocation of state-financed places starting from 2016, which resulted in a stable amount of students and a gradual fall in the number of dropouts due to financial reasons; *) dissemination of the programme among the graduates of other LLU study programmes as an option to continue their education and study management in the master's degree study programme.

- Purposeful work to attract foreign students. The admission of foreign students was started in 2015, but the first students enrolled in the spring of 2016. The activities of attracting foreign students improved in cooperation with the International Cooperation Centre, which resulted in the gradual increase of foreign students. At the beginning of the period the foreign students accounted for 10% of the total number of the students in the programme, but in October of 2019 the number has reached 27%. However, the admission of foreign students was influenced by external factors (such as problems with a visa arrangement, residence permits), which hampered more intensive admission of foreign students and negatively

influenced the organisation of the study process.

- <u>Maintaining the unchanged dropout rate</u>. The analysis of the number of exmatriculated students who decided to discontinue their studies shows that the share of dropout students fluctuated from 9% to 25%. The main reasons for exmatriculation were investigated to understand why students had decided to depart before the completion of studies. It turned out that the majority of exmatriculated students (30% on average) were students who had finished the theoretical part, studied in the 2nd year and were close to the final stage. These students departed shortly before of the submission of their final theses. Interviews were conducted with these students and the students revealed that *) they could not combine the work with the research activities for the final thesis; *) they were unable follow the schedule of writing and submitting a master thesis. On the other hand, 35% on average from the exmatriculated students returned and resumed their studies. The main reasons for exmatriculation during the 1st year of studies were the following: 10% of students did not commence the studies (mostly foreign students show this negative tendency), 35% of students did not settle the financial obligations, 39% of students departed at their own request due to family conditions, change of the living place, work conditions, the wrong choice of programme, the programme did not meet their expectations, disssatisfaction with a busy schedule, it was not possible to dedicate enough time to the studies, studying in several study programmes simultaneously and unable to combine them. 16% of students were exmatriculated because they failed to complete the programme's requirements.

- <u>Maintaining the interest of potential students</u>. The interest of students during the reference period was changeable, which was mostly influenced by external factors. The decrease of students' interest in 2013-2015 may be explained by a comparatively critical financial situation in those yars because the financial crisis had left an impact on the higher education in Latvia due to which inflation rates were added to the tuition fee, therefore the admission of new students and keeping of existing students were difficult. The situation improved when the amount of the tuition fee did not change any more and also state-financed places (a very small amount) were allocated from 2015 (5 state-financed places), so there was an increase of admitted students by 68% compared with the previous year. In the next years the increase rate slightly decreased and levelled off in 2017-2018, and in 2019 there was an increase (+23% compared with the previous year). The competition per one state-financed place remained stable, i.e., 10 applicants per one place.

Initially, the programme focused on the graduates of our faculty to provide them with an opportunity to continue studies in the direction "Management" at all levels: the 1st level programme "Business Studies", followed by the bachelor's degree programme "Entrepreneurship and Business Management", and the master's degree programme "Business Management", which would be a complete cycle studies. However, now the admission of students occurs in four channels, that are depicted in Fig.5.1.
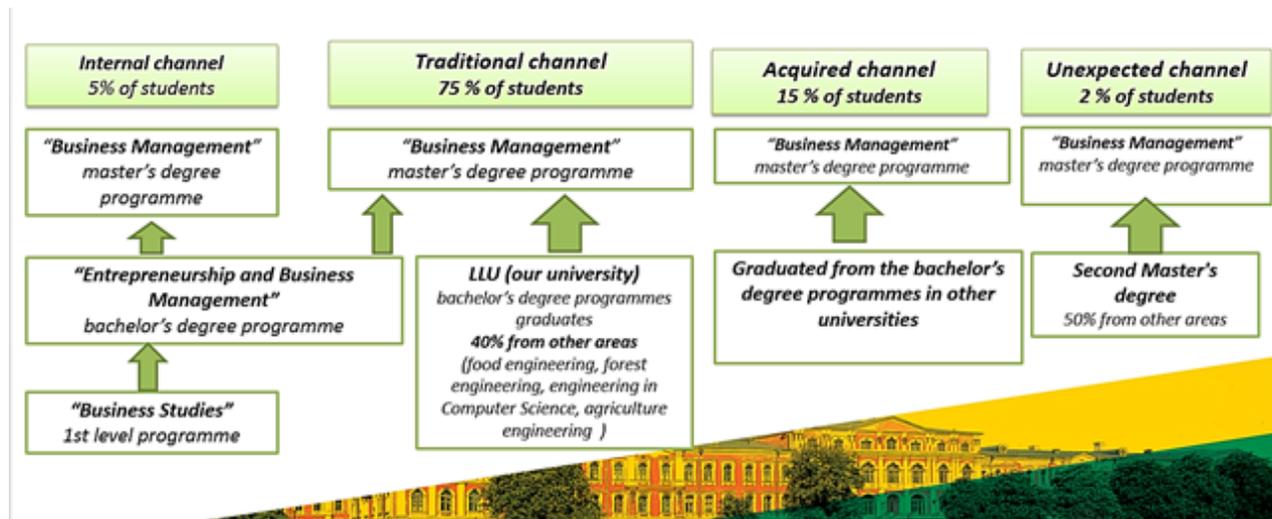
Fig. 5.1. The strategic admission channels of the master's degree programme "Business Management".

As we can see, 80% of the admitted students were graduates of this university, 15 of admitted students graduated from the bachelor's degree programmes in other universities, but 2% of students already had a master's degree and they were willing to obtain the master's degree in entrepreneurship and management.

1.3. Analysis and assessment of the interrelation between the name of the study programme, the degree or professional qualification to be acquired or the degree and professional qualification to be acquired, the aims, objectives, learning outcomes, and the admission requirements.

The interrelation of the programme's indicators are formed on the basis of external quality factors and internal quality factors. The external factors are the following: the programme should comply with several regulatory documents: "the Law on Institutions of Higher Education of the Republic of Latvia", "the Regulation on Opening and Accreditation of Study Directions of the Cabinet of Ministers", "Regulations on the State Standard of Second Level Professional Higher Education" of the Cabinet of Ministers, the profession standard, LLU internal rules and regulations. The internal factors are the following: the title of the programme, its aims and tasks should be interrelated, learning outcomes should be related with the content of the programme.

These factors are described in Section 1.1. The indicators of the aim, tasks and admission requirements are consistent and mutually related. The admission requirements are appropriate and sufficient to achieve the learning outcomes relevant to the ncessary quality and duration of the studies; the enrollment of students takes place in accordance with the procedures and criteria approved by LLU. The learning outcomes to be achieved correspond to the aim and tasks of the programme and the content of the programme. The degree and professional qualifications awarded are dependent on the learning outcomes to be achieved and the content of the study programme.

In addition, the programme's presence and integration in LLU was based on LLU strategic goals and the univerity's territorial positioning which is to *promote international competitiveness of related economic sectors, where it is important to compete with companies of the Baltic Sea region,* as well as the vision of the university: *efficient management and cost-effective use of natural resources, and development of competitive products and services,* LLU research programme, where social

sciences is one of the three priority research fields and are interrelated with the aim and tasks as well as learning outcomes: *Sustainable economics of the bioresources, research of sustainable development of territories, efficiency of manufacturing processes and competitiveness of companies.* Moreover, *efficiency of manufacturing processes and competitiveness of companies* in the context of LLU provides development of synergy centres in resource-intensive and unique study directions (RIS3 specialisation areas). The long-term objective of LLU is aimed at high-quality studies that ensure training of internationally competitive specialists, which is fully in line with the aim and tasks of the programme.

Foreign students have to meet additional admission requirements – English skills at least at B2 level. To date, admission practices have allowed universities themselves to set criteria for the admission of foreign students. Accordingly, universities themselves conducted remote language skills interviews via Skype video calls to identify the potential student's knowledge of English. The LLU International Cooperation Centre in cooperation with the LLU Language Centre conducted such interviews, interviewing the students on everyday issues, their educational backgrounds and motivations to study at LLU. If necessary, applicants were also asked to provide short written answers to identify their knowledge of English grammar. Applicants were awarded LLU Certificates of Compliance (or incompliance) with the standard of English language proficiency required for studies at LLU. The applicants who had submitted an internationally recognized English language certificate (IELTS, TOEFL or equivalent) with a minimum of IELTS 5.5 for bachelor programmes and 6.0 for master programmes were exempted from interviews. This level is comparable to B2 level.

As from the autumn semester of 2020, Cabinet regulation No. 846 *Amendments to the Regulation regarding Requirements, Criteria and Procedure for Admission to Study Programmes* comes into force, stating that the foreigner shall attach to the application a document issued by an international testing institution within the last five years that certifies that the foreigner has at least B2 level of English language skills. The mentioned document is not required if the foreigner has acquired secondary education or higher education in the language of delivery of the relevant programme.

III - DESCRIPTION OF THE STUDY PROGRAMME (2. The Content of Studies and Implementation Thereof)

2.1. Assessment of the relevance of the content of the study course/ module and the compliance with the needs of the relevant industry and labour market and with the trends in science. Provide information on how and whether the content of the study course/ module is updated in line with the development trends of the relevant industry, labour market, and science. In 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.

The content and structure of the study programme is in compliance with the regulation No.512 "Regulations on the State Standard of Second Level Professional Higher Education" of the Cabinet of Ministers, as of August 26, 2014. (Annex 14).

The relevance of the programme and the study courses to the trends of the labour market and the

industry was evaluated from different aspects:

- The research "Study on labour demand trends" (the author: "Dynamic University", Ltd) was conducted in the framework of the project No. 8.2.3.0/18/A/009 "The Management Improvement of the Latvia University of Life Sciences and Technologies".

The authors of the research conclude that 49% of the surveyed employers predict that demand for highly qualified specialists will grow over the next 5-10 years, of which 20% believe the demand will grow significantly, while 29% indicate that demand will increase slightly. As regards the management science, 45% of respondents indicate that demand will rise, 50% of respondents consider that it will remain the same, and only 5% have the opinion that it will decrease.

This trend is positive because the companies surveyed feel the need for highly qualified workers in management science. The authors of the research also highlighted the skills important for a manager: communication, problem solving, cooperation and planning. Digital skills are equally important today, including collecting, analyzing big data, applying new technologies in the context of organisation development (automation, databases, digital marketing).

Business management is closely linked with effective resource planning, team motivation, feedback, decision-making in stressful situations, and implementation of change. The focus group participants, on the other hand, pointed out that soft skills, i.e., teamwork skills, empathy, team motivation, creating a team-friendly environment, decision-making in stressful and changing situations are particularly important to managers.

It is possible to conclude on the basis of the results of the above research that the professional master's degree programme "Business Management" is designed to adapt to the changing environment of the labour market and demands for the development of skills and competences with a particular emphasis on interdisciplinary skills (use of resources, assessment of regional differences in economic decision-making and the cross-sectoral context of the bioeconomy) as well as soft skills, such as teamwork, decision making in changing situations, leadership development, etc.

- The evaluation "Industry expert services for evaluating the content of study programmes and making recommendations" was conducted in the framework of the project No. 8.2.3.0/18/A/009, where the evaluator was "Latvian Agricultural Organization Cooperation Council" (LAOCC).

An expert holds the view that "Business Management" programme corresponds to LLU strategy and the professional standard. Students are motivated to learn business management because professional business managers and business experts are required in the labour market. The expert considers it important that graduates from various bachelor's degree programmes and other directions study in the programme, and that they obtain new knowledge thus improving their previous knowledge and skills in such study courses as *Business Planning and Controlling, Project Management, Finance and Investment Management.* The expert points out that the programme is valuable by its practical approach because part of teaching staff members are practitioners, and also traineeship is included in the programme in relevant companies.

The initiative of arranging summer schools (as a form of traineeship) in cooperation with industry NGO representatives received a positive evaluation as both students and local communities benefited from these activities.

There are some recommendations from LAOCC: a) studies and work are often incompatible, so it should be solved at national level that financial conditions are a reason for dropping out of the university; b) overlapping and duplication of documents, regulations, occupational standards,

education standards should be reduced as employers often fail to understand this excessive bureaucracy and react quickly to changes in the educational process; bureaucracy also restricts initiative in the education process.

The award of a master's degree is based on the achievements and knowledge of the relevant scientific discipline or field of artistic creation. A student acquires this competence by conducting the research on the given topic in the course, participating in discussions and presenting the results of his / her research. At the final stage of the master's thesis, students are required to participate at ESAF scientific conference for master students "Development in Diversity" with the publication of their   research (http://www.esaf.llu.lv/sites/esaf/files/2016-11/Petijuma_Publikaciju_noformesanas_noteikumi.pdf) The university arranges annual international scientific conference "Students on their Way to Science" for undergraduate, post-graduate and doctoral students to develop and improve their research skills. Students are invited to submit abstracts and make a presentation. The approved abstracts are published in the conference website. During 2014-2019, rearch results of 15 students who studied in the programme (31% of the programme's last year students) were published. In addition, part of students together with their supervisor continued research after the successful defence of the master thesis and prepared a scientific publication introducing with the research results of the master thesis, thus 7 articles were published in the reference period, 4 of them were indexed in Web of Science and 2 of them were indexed in Scopus, which gives evidence of obtaining knowledge based on science and creativity.

2.2. Assessment of the interrelation between the information included in the study courses/ modules, the intended learning outcomes, the set aims and other indicators, the relation between the aims of the study course/ module and the aims and intended outcomes of the study programme. In 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.

The following conclusions can be drawn on the basis of the analysis of the structure of the programme (see the mapping of the programme in Annex 17), the interrelation between the aim and tasks:

- the study programme is designed to purposefully guide students through the learning paths from the acquisition of knowledge and understanding of the nature of the national economy, resource management and economic system, business environment and significance at regional, national and global level (*Economic Resources; Entrepreneurial Legislation and Institutional Environment; National and Regional Economy*) to extended and conceptual knowledge of management process and business process in companies and their influencing factors. Therefore, the study courses *Finance and Investment Management*, *Human Resources Management* include a combination of knowledge creating understanding and extended and conceptual knowledge;
- the study courses (*Mathematical statistics, Business Planning and Controlling, Knowledge Management and Innovations*) are included in the curriculum of the programme to provide both advanced and conceptual knowledge acquisition and training of professional skills to be able to work independently to solve complex or systemic business management problems and to guide reasonable decision making.
- A group of study courses (*International Marketing, Business Evaluation, Quality Systems*) are

designed to develop students' professional skills with a focus on individual problems and decision-making, so that they are able to use soft skills to communicate and interact with professionals and the general public on professional issues, strategies and policies in relation to the aims and tasks.

- Professional skills in study courses (*Project Management, Methodology of Research and Publications*) are formed to enable students to find and use information for business management tasks and / or conduct the necessary specialized research. Students improve communication, teamwork, leadership skills, abilities to work in an international team, to offer reasoned arguments to support a new idea in front of an audience of professionals.
- A range of specialized study courses (*Social Entrepreneurship; Risk Management; Strategic Management; Management of Logistic Systems*) focus on the development of soft skills and competences. The main task of these study courses is to critically analyze problems and challenges in entrepreneurship, justify solutions, as well as integrate knowledge of various fields for the effective operation of a business (organization) according to the set goals;
- traineeships (*Enterprise Management*, *Resources Management, Entrepreneurship)* and *Master thesis* form the horizontal basis of the programme , where all knowledge, skills and competences are integrated.

2.3. Assessment of the study implementation methods (including the evaluation methods) by providing the analysis of how the study implementation methods (including the evaluation methods) used in the study courses/ modules are selected, what they are, and how they contribute to the achievement of the learning outcomes of the study courses and the aims of the study programme. Provide an explanation of how the student-centred principles are taken into account in the implementation of the study process.

A careful and thoughtful design and implementation of the study programme and evaluation of learning outcomes are ensured by means of the mapping (See the mapping in Annex 17) depending on their impact, thus a module principle is used in relation to the aim and tasks of the programme and linking them with knowledge, skills and competences. The selection of precise implementation methods, and the implementation is organized in modules, including the assessment.

Interconnection of implementation and assessment methods:

- The assessment of skills constitutes 58% of the whole amount (of which professional skills account for 44% and soft skills account for 14%), the assessment of knowledge constitute 26%, the assessment of competence constitute 16%. Such a proportion of grades is consistent with the professional programme as well as with the aim of the programme, which is aimed at interdisciplinary approach and acquisition of professional skills.
- If we evaluate implementation methods of the study process in more detail, then independent work and practical work dominate in development of professional skills, including calculations and information gathering and processing (75% of assessments), then such methods as debates, discussions, case studies, publications, research paper writing, creation of a portfolio, etc. are used according to the aim of the study course. In some cases professional skills (19%) form the basis for examination assessment. Thus, we can conclude that, as regards acquiring professional skills, each teaching staff member chooses the most appropriate assessment method for a study course.
- The knowledge is assessed by means of tests, practical works, calculations, independent works, reports, as a part of the examination assessment. In many of cases individual work

(24%) of students is used as a method.

- The following activities and events are arranged by the faculty in order to link the knowledge, skills and competences as well as study courses with economic sectors, practical business activities of companies (organizations), international dimension and knowledge transfer:

1. *ESAF Graduate Week*;
2. *International Week*;
3. *Guest-lectures of employers / professionals*. During the reference period representatives of such companies (organizations) have delivered guest lectures as "Civitta Latvia"; LLU Fundamental Library; "Citadele banka"; "Genpact", "Accenture Latvija", Ltd; Monetary Department of the Bank of Latvija; EU Press Centre in Brussels; Regional Information centre's contact office for immigrants "Zemgale" in Jelgava, etc.;
4. *Study trips*. The students of the programme have visited Jelgava Regional Tourism Centre; LLU Technology and Knowledge Transfer Centre; Charity Shop "Tuvu"; participated in the meeting (discussion) with the Deputy of the 1st Chairman of the European Commission (on the future of EU) in the EC representation in Latvia; Zemgale Region Competence Development Centre etc.
5. *BOVA University Network study courses*: students can apply for study courses in NOVA/BOVA university network (the Baltic Forestry, Veterinary and Agricultural University network). Thus 22 students have applied for study courses in this network.

The student-centred learning is based on several principles that are included in ESG standards.

Table 5.1.

The student-centred learning principles and their implementation in the study process

Requirements for student-centred learning*:*

The study process takes into account and respects the diversity of the students' audience and their needs in developing appropriate learning pathways;	Programmes of study courses outline learning paths that are based on the assessment of knowledge, skills and competence at three levels; the description of levels, the assessment criteria and methods of implementation are provided.
The study process takes into account and use various methods of the implementation of the programme according to the possibilities;	Only full-time studies are offered according to LLU strategy and ESAF planning documents. The decision was based on surveys of students, graduates and employers, as well as the experience of the faculty in implementation of other programs, and the duration of studies was the main reason.
Depending on the circumstances, a variety of pedagogical methods are used;	Appropriate pedagogical methods, approaches and forms of organization of the study process are indicated in each study course.
The study process facilitates students' independence while providing supervision and support of teaching staff;	Each study course specifies the amount of hours required for independent work as well as the number of hours devoted to practical work, so that students can fully acquire the material and make a progress successfully along the learning paths. The role of the teaching staff is to advice and guide.

The assessment procedure:

The evaluation criteria and methods, as well as the criteria for giving grades have been made public in advance;	"LLU Regulation of Studies" determines that the knowledge and skills gained during contact lectures and individual work should be monitored throughout the semester. A member of academic staff regularly monitors the students' knowledge and skills during the course of the semester, using the assessment methods (tests, homework, calculations, graphic works, reports, etc.) specified in the extended programme of the course. The descriptions of study courses are available to students online in the e-studies environment; the lecturer introduces the students with the course content, conditions and recommended literature for individual studies and additional studies, provides information on the scheduling.
The assessment gives students the opportunity to demonstrate the extent to which they have achieved the expected learning outcomes;	The amount of the obtained CP signifies the successful acquisition of the part of the programme which shows to what extent a student has mastered a particular part of the programme. As regards the acquisition of a study course, it is determined by a method of assessment of the knowledge, skills and competence in the course and their acquisition level.
Students receive feedback which provides advice in relation to the learning process, if needed	Tutorials of the academic staff play an important part in providing a feedback (according to the approved schedule, which is available online in the ESAF website, LLU IS and the e-studies platform, as well in the institutions and departments). Students have an opportunity to receive a consultation online and individually by means of communication online, using LLU institutional e-mail system and in e-studies environment.
Where possible, more than one person performs the assessment;	The master thesis is evaluated by a commission of 7 people, 4 of which are representatives of employers. The traineeship report is defended in front of the traineeship commission of 3 people. There are several study courses in the programme, which are taught by two and more members of academic staff, in total there are six such study courses which make up 14 CP (21ECTS). Thus, 70% on average of the total study programme is assessed by more than one member of academic staff.

Assessment is consistent, fair to all students and implemented according to the approved procedures;	The following basic principles are observed in the assessment: the principle of openness and clarity of requirements – a set of requirements are outlined for the assessment of learning outcomes according to the aims and tasks of the programme and study courses; the principle of mandatory evaluation – it is necessary to obtain a successful evaluation for the acquisition of the content of the programme; The principle of reviewing the assessment – the university determines the procedure of a repeated assessment (according to Article 4.2 and 4.3. of *the LLU Regulation of Studies)*; The principle of diversity of assessment methods – different types of assessment are used to assess the learning outcomes (the following types of assessment are used in the programme: a formal test with a grade; an examination; the traineeship assessment in the presence of a commission; a state examination in the presence of the state examination commission). The evaluation of a student's academic success is performed according to a 10-point scale. The assessment procedure and its system is determined in the LLU Regulation of Studies. The assessment system of the study course depends on the learning outcomes.
There is a procedure for students' appeals.	The appeals procedure is regulated by the LLU Regulation of Studies. Article 5 of the Regulation states the appeals procedure in case of assessment of an examination / a final thesis, the organization of the study process and its implementation, the tuition fee, exmatriculation.

2.4. If the study programme entails a traineeship, provide the analysis and assessment of the relation between the tasks of the traineeship included in the study programme and the learning outcomes of the study programme. Specify how the higher education institution/ college supports the students within the study programme regarding the fulfilment of the tasks set for students during the traineeship.

The study programme includes traineeship in compliance with "*Regulations on the State Standard of Second Level Professional Higher Education*" of the Cabinet of Ministers. The volume of traineeship should be not less than 6 credit points or not less than 26 credit points if it is envisaged for graduates of academic Bachelor's degree study programme.

The aim of the traineeship is to strengthen the theoretical knowledge and develop overall management competence and acquire a set of practical skills necessary for a manager. The specific tasks and knowledge, skills and competence have been designed for each of the traineeships separately.

The professional traineeship "Enterprise Management" (6CP) has set the following tasks: 1) to describe and find out the place and role of a comapny (organisation) in the national economy of Latvia, in the economy of the EU and / or the global context. 2) characterize and analyze the management process (of a company/organization) 3) to study the application of modern

management methods in companies or organizations, 4) to develop recommendations for improving the management process and its elements within a particular company / organization.

The professional traineeship "Resources Management" (8CP) focuses on methods for identifying, planning and organizing resources within functional units of a company / organization. The tasks of the traineeship are: 1) to evaluate the necessity and importance of resources for the operation of a particular company / organization, 2) to analyze the availability and importance of resources, 3) to describe the activities of the company / organization; 4) to explore the organization and planning of resources used in the company / organization by using resource planning and evaluation methods; 5) to develop recommendations for a more rational use of resources in a particular company / organization. This approach has a consecutive arrangement to provide an opportunity for students to apply their professional skills and competences to build on the previously acquired material (e.g., *Quality Systems, International Marketing, Risk Management, Management of Logistic Systems*)

The professional traineeship "Entrepreneurship" (12 CP) is focused on students' ability to integrate the knowledge and skills of various fields to analyse the entrepreneurship development and work out reasoned strategic recommendations. The tasks of the traineeship are: 1) to characterize the business activities of a company / organization; 2) to study the impact of the business environment on the development of an industry, a company or individual processes taking into account foreign experience, comparative indicators and evaluation methods; 3) to evaluate and analyze the performance of the company (institution / organization); 4) to perform a strategic evaluation of the company / organization and directions of its development; 5) to make recommendations for the future operation of the company (institution / organization). The achievement of the traineeship tasks was ensured through the exact definition of the aims and tasks of the traineeship in accordance with the mapping of the knowledge, skills and competence of the programme, and a student is purposefully motivated by means of *general and specific traineeship tasks* to explore and apply in practice different knowledge and skills in companies of their traineeship. Traineeship placements may be searched via LLU website, ESAF Alumni Club, by approaching the director of the programme, during the ESAF Graduate Week, special annual events "DNA of an entrepreneur" arranged together with entrepreneurs, Jelgava Business Incubator and so on, including group mates. The opportunities for traineeship placements, provision and procedure are described in Section 2.5.3. of the report.

For foreign students, just like for all students, traineeships are implemented in accordance with the requirements of the practice curriculum. Several foreign students have already found jobs in Latvia and EU countries, and their jobs could also be used as work placement organizations. If necessary, the practice supervisor provides assistance in finding and selecting a work placement. For example, a second year foreign student (Nigeria) will take a traineeship at the Ltd. RIMI BALTIC .

LLU students participating in the Erasmus + programme may take their traineeships at foreign companies or institutions located in one of the Erasmus + countries.

Under the Erasmus +programme, students have taken traineeships in the Netherlands, France, and Spain.

2.5. 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 evaluations of the final theses.

The interrelation between science and education, the priority research directions in social sciences in compliance with the LLU strategy 2014-2020 was designed to be transferred to the levels of studies to promote unique and relevant research activities. The choice of topic depended not only on the research directions specified in the LLU strategy, current issues of the industry, but also on the professional and personal interests of a master student, which were respected and supervised in the research work.   LLU has determined three main priority research directions and their goals in the strategy's research programme, and they are in the focus of the faculty's research activities: Sustainable economics of the bioresource industries, Sustainable development of territories, Efficiency of manufacturing processes and competitiveness of companies. The priority research directions include priority research topics. Therefore research activities for elaboration of the master papers focus on the achievement of the university's research strategic goal. The analysis of the master theses shows that:

- 64% of the topics of all the master theses corresponded to the directions of LLU research strategy. In the period of 6 years, 23 % of all defended master theses were related to the research directions of *Sustainable economics of the bioresource industries,* 7 % of the master theses covered the topic of *Sustainable development of territories*; and 34% of them were related to *Efficiency of manufacturing processes and competitiveness of companies.*
- as regards the recommended priority topics for master theses, one of the most popular topics was the development of effective business models, strategy, planning; such works accounted for 20% of all papers;
- 36% of the defended theses referred to the topics that were not directly related to the priority research directions stated in the LLU Strategy, but they were important for professional, scientific and career growth of master students. This group also included topics which were recommended by companies (organizations). These topics included: Problems of administrative processes and management (10% of all master papers), research of management and management process, methods and functions (14% of all papers), application of financial instruments in entrepreneurship, financial management, risk analysis (6% of all papers). An influence of economic (macroeconomic) processes on the entrepreneurship (3% of all papers); digitalization processes in the entrepreneurship (3% of all papers)

The master theses were defended in front of the State Examination Commission. All these years, a chairperson of the commission of the programme "Business Management" has been Head of the Development Supervision and Assessment Department and Deputy Head of the Cross-sectoral Coordination Centre of the Republic of Latvia. The members of the commission are academic staff members from other universities of Latvia: Rīga Stradiņš University, RTU, University of Latvia and representatives of employers: COONNECT Latvia; "Swedbank", Plc.; "Latvijas Mobilais Telefons", Ltd.; Verifone Baltic, Ltd; "Janne", Ltd.; "Tulpe", Ltd.

Table 5.2.

The assessment of master theses in the study programme "Business Management"

Indicators	Academic Year					
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Number of defended theses	8	6	9	12	13	16
An average grade, points	7.5	8.8	6.8	7.5	7.5	7.5
Number of the best papers	0	4	0	3	2	4
Number of papers recommended for implementation	2	0	0	2	3	5

As we can see in the table, the grades for the papers vary, however, a more detailed analysis of points in assessment shows that 5% of all final theses received the grade "outstanding", 27% of the theses received the grade "excellent", 30% were assessed with the "very good" or "good", 5% received the grade "almost good", 3% received "average" and 2% (or 1 paper in the reference period) received the evaluation "almost average". The highest rated works were those whose authors excelled in the use of innovative methods and / or were fully aware of current issues of industry / company and tackled complex problems in their theses. The titles of several of the most highly rated works are given below:

- "Analysis of logistic systems in organic farming in Latvia";
- "Evaluation of cash registers and technical requirements for cash registers and in the retail and service sectors";
- "Analysis of preconditions for establishment of Zemgale Regional Diabetes Advisory Center;
- "Introduction and development of the brand "Latvenergo", Ltd., in the Baltic States";
- "Improvement possibilities of power supply connection installation procedure in "Sadales tīkls", Plc";
- "Evaluation of nitrogen and phosphorus in runoff water from agricultural land in farms";
- "Analysis of profitability in relation to the net profit margin of the farm "Cīruļi";
- "Strategic perspectives for action of Konekesko Latvija";
- "Analysis of "TUVU" social impact"
- "Expectations of Generation Y in the labour market"
- "Characteristics of Internet of Things and their possibilities in the entrepreneurship"
- "Management style and its evaluation in the company Euro Live Technologies"
- "Strategic analysis of Latvian market of Shri Lanka tea".

The State Examination Commission in their report evaluated the defended theses and mentioned the best ones for practical implementation. The theses were worked out either at the request of a entrepreneur or a master student took an initiative with the purpose to develop a new approach or a solution for the development of his/her company. The titles of several of the most highly rated theses are below:

- *"Evaluation of TENAX Group activities and development opportunities"*;
- *"Economic justification of soil treatment technologies in "Joži", Ltd*;
- *"Analysis of implementation experience of LEAN production system in Latvian companies"*;
- *"Use of integrated quality managment system cycle LEAN six Sigma DMAIC in "TS RĪGA", Ltd."*;
- *"Evaluation of breeding work in the farm "Kārkli""*;
- *"Analysis of business activities and development opportunities of the farm "Šāvēji""*;
- *"Advantages of establishment of a centralized warehouse in Dinex Grupa's spare part segment"*
- *"Opportunities for growing garlic in Latvia"*
- *"Market research on a new alcoholic beverage product"*

2.6. Analysis and assessment of the outcomes of the surveys conducted among the students, graduates, and employers, and the use of these outcomes for the improvement of the content and quality of studies by providing the respective examples.

Student surveys are conducted using a variety of multi-sided surveys and opinion poll methods. During the study process informal meetings, discussions and student interviews are conducted by the the director of the programme to find out students' opinion regarding the study process and to exchange views on opportunities for students at the university and faculty, including material and technical provision, representation of students, international cooperation, etc. The student survey is carried out by the director of the programme to find out students' views on the organization of the study process (once every two years) and practical implementation of the programme.
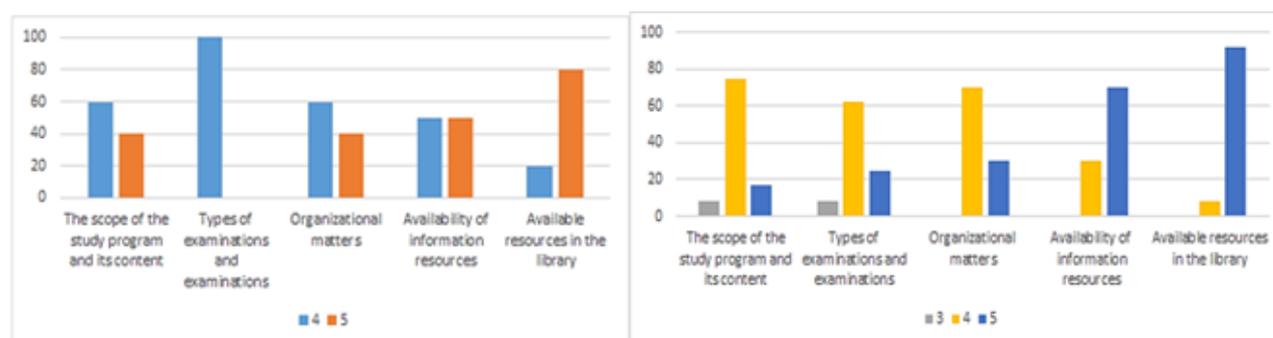
Fig. 5.2. The survey results regarding suffiecieny of the information (2014 and 2018)

The analysis of the results of the surveys shows that the number of students who have positive opinion about <u>information sufficiency and availability of information resources</u> has significantly increased. Thus, in 2014 information suffiency was evaluated with 5 points (very good) by 50% of students, but in 2018 information suffiency was evaluated with 5 points by 70% of students. The library resources were evaluated with 5 points (very good) by 80% of respondents in 2014, and in 2018 this amount of students reached 91%. It may be explained by the fact that students were able

to use e-studies environment where teaching staff members could provide more detailed explanations. In the time period from 2014 to 2019, much attention was paid to the development of the ESAF Information Centre of Studies and Research.

Students' opinion regarding the volume of the programme and types of assessment included the evaluation 3 (average), which may be explained by the fact that in 2018 the survey was filled in also by foreign students (20% of respondents) and it was clear that foreign students in their first semester of studies faced some additionce challenges such as culture differences and adaptation to different organization.
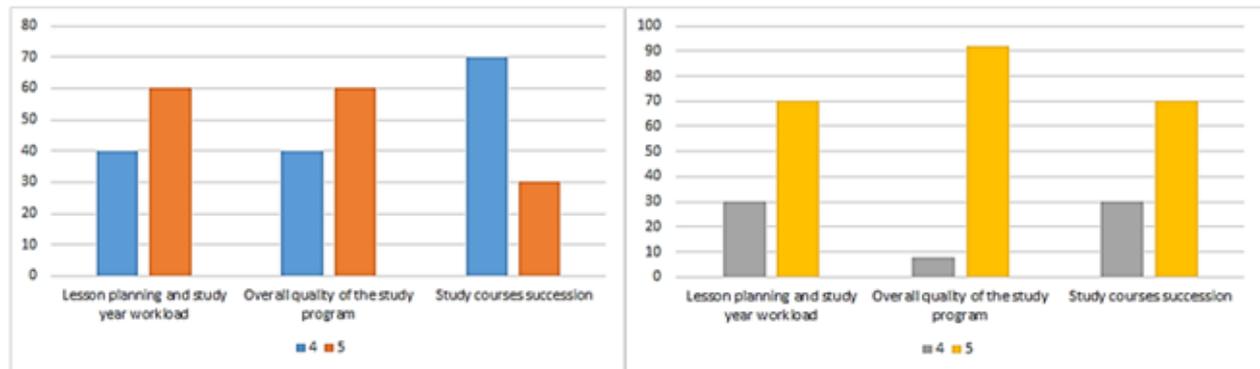
Fig. 5.3. The survey results regarding the organization of study process (2014 and 2018)

It is positive that the number of students who has a positive opinion regarding the overall quality of the programme has been increasing every year (in 2014 the quality of the programme was evaluated "very good" in 60% of cases, but in 2018 the number of positive evaluation reached 91%) . The students' evaluation of the organization of the study process was mainly positive, the majority of respondents considered it to be "very good", "good". In the recommendation part of the survey students made proposals for the improvement of the premises and facilities (for example, the layot of the rooms, the lack of parking places, catering).

Student survey regarding the quality of teaching staff and teaching methods is performed by the LLU ESAF group of sociological research. The survey "Academic Staff in the Opinion of students," is based on the rector's decision No. 03-5 "On the procedure for conducting a student survey on the work of academic staff", as of February 21, 2007, and students are entitled to participate in the survey on the basis of the decision of LLU Senate No. 8-17 "On the Regulation of Studies" as of June 12, 2013.

The survey provides feedback on the study results with regard to the content and the study process. The analysis of the results of the survey 1) enables the teaching staff to evaluate and improve their work; 2) provides recommendations to the study programme directors on how to improve the content of the study programme; 3) enables LLU management and heads of departments or institutes to improve the quality of studies based on the obtained information.

The results of the survey are also used: 1) when evaluating applications of members of academic staff in competitions for academic positions; 2) when signing employment agreements with visiting lecturers; 3) when making changes in the curriculums, the content of study courses and the methodology of their implementation.

The results of the survey are available in LLUIS for: 1) each member of academic staff on his/her study courses; 2) heads of departments, centres, directors of institutes about the academic staff of their unit; 3) directors of study programmes on academic staff members teaching study courses in their programme 4) the deans on the academic staff of the faculty, 5) the rector and vice-rector for studies on overall results of the student surveys.

In 2015/2016, **a graduate survey** was carried out to find out graduates' satisfaction of the programme. The results showed that 78% of respondents were satisfied, 11% were somewhat satisfied, 11% were more satisfied than dissatisfied. Since the survey was conducted right after the defence of master theses, it had to be concluded the students' opinion was influenced by the assessment results of master's thesis. Therefore, we decided that results of such a survey cannot be used for conclusions and started looking for ways to conduct graduate surveys after a longer period from the graduation. Such a survey was organized by LLU in 2017 by sending out centralized online questionnaires to our graduates. The survey results were the following: graduates who had completed their master's degree studies and were currently working said that in 30% of cases graduates worked in their specialty in companies; 50% of respondents said that they had a good theoretical and practical background and were able to carry out their duties immediately, while 20% were able to do so after a short period of training in the workplace. 100% of the graduates indicated that they had acquired the necessary theoretical knowledge for work in the field and were able to apply it to fulfill their tasks. Graduates were more critical regarding the practical skills necessary for the work in the sector, because the received answers to the question, if they were able to use the acquired practical skills for the performance of tasks, showed that 60% of respondents answered "more likely" and 40% answered "less likely".

It is positive that our graduates work in various fields related to education, agriculture, power supply, construction, health care, logistics, services, forestry and tourism. 40% of graduates offered traineeship placements to students, but the same number were not willing to be involved in the development of study programmes. It is positive that 50% of graduates work as managers, 20% as HR managers, the rest as business owners, managers of units, and one is a strategic process director (COO). The respondents of the survey employ other graduates of our faculty in their companies. In total, the questionnaires indicate that 177 graduates of the faculty programme work in companies.

The feedback on the content of the study programme and its relevance to the labor market is obtained in cooperation with employers in the places of traineeships.

Upon the completion of the traineeship, a student is entitled to submit a reference of a supervisor from the company of the traineeship for the defence of the traineeship. This assessment of the traineeship is taken into account in the overall assessment of the traineeship.

Table 5.3.

The supervisor's (employer's) assessment of master students' traineeship in the programme "Business Management"

Rating / Criteria	Excellent	Good	Average	Insufficient
Labour discipline	75%	25%		
Attitudes toward work to be done	91.7%	8.3%		
Trainee to be carried out individual work task	75%	25%		
Work and performance of the instruction	75%	25%		
Basic skills	58.3%	41,7%		
Professional skills	66.7%	33.3%		
Application of the theory	50%	41.7%	8.3%	
Loyalty to the company	91.7%	8.3%		
Showing initiative	91.7%	8.3%		
The total assessment (10 point scale)	10 points(with distinction) - 33.3% 9 points (excellent) - 50% 8 points (very good) - 16.7%			

Traineeship evaluations (during the reference period) showed that the highest evaluation from the companies were given to students' attitude towards the work to be done, loyalty to the company

and demonstration of initiative, i.e., 92% of students received "excellent"; while such criteria as basic skills and application of theoretical knowledge were ranked lower (58% and 50% of students received "excellent") by employers, however, some students received "average" (8%) for their application of theoretical knowledge.

As it was mentioned above, the faculty arranges annual "Graduate Lecture Week". In the period from 2013 to 2018 students had an opportunity to attend lectures of 48 graduates who worked in their field, for example, such graduates of the study programme "Business Management" participated in the lecture week: a manager of the product group of "KONEKESKO Latvija", a director of IT infrastructure functions of "Latvenergo", Plc., a specialist of public relations of Jelgava Regional Tourism Centre.

2.7. Provide the assessment of the options of the incoming and outgoing mobility of the students, the dynamics of the number of the used opportunities, and the recognition of the study courses acquired during the mobility.

The students of the programme have an opportunity to participate in the ERASMUS+ mobility programme to study in other European universities. Many students studied in partner universities and worked in Erasmus+ traineeship. Many students chose to participate in the BOVA network activities, project activities and inter-university activites.

Table 5.4.

Number of students of the programme "Business Management" who participated in Erasmus+ mobility programme and BOVA network activities

Indicators	Academic year					
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Number of students (ERASMUS+ mobility)	2			3	3	2
The partner university	Aleksandras Stulginskis University, Lithuania			Czech University of Applied Sciences, Slovak University of Agriculture, Nitra	Czech University of Applied Sciences Rozenheimas Lietiško zinātņu universitāte, Vācija	Rozenheim university of applied sciences, Germany, Obuda University, Hungary
Number of students (ERASMUS+ traineeship)					1	4
Traineeship placement					Aleksandras Stulginskis University, Lithuania	Associação Nacional Avaliadores Imobiliários, Portugal, TBM Group, Czech Republic, SMA Gebaudereinigung GmbH, Germany Vageningen University, The Netherlands
Number of students with BOVA certificates		4	6		7	5
The organizer of BOVA study course		Aleksandras Stulginskis University, Lithuania	Aleksandras Stulginskis University, Lithuania, Estonian University of Applied Sciences, Tartu, Estonia		Aleksandras Stulginskis University, Lithuania Estonian University of Applied Sciences, Tartu, Estonia	Vytautas Magnus University, Lithuania
The title of BOVA study course		Sustainable Agriculture for Rural Development 4 ECTS	Sustainable Agriculture for Rural Development 4 ECTS Innovation and Entrepreneurship for Rural Development 3 ECTS		Sustainable Agriculture for Rural Development 4 ECTS Innovation and Entrepreneurship for Rural Development 3 ECTS	Sustainable Agriculture for Rural Development 4 ECTS Application of Circular Economy Principles in Landfills 3 ECTS

Relatively popular among students are courses offered by NOVA / BOVA that not only include theoretical knowledge but also offer practical skills through case studies, visits to entrepreneurs, associations and innovators. Thus for example, in 2015 the main goal of the BOVA courses was to deepen and broaden students' knowledge of sustainable agriculture and to develop students' skills in solving various rural development problems through the multifunctionality of agriculture. Students had the opportunity to attend theoretical lectures on the role of agriculture in regional development, social and economic cohesion, sustainable financial decision-making, the impact of social factors on the development of agribusiness, the role of cultural heritage and urban-rural partnerships. The lecturers were teaching staff from Latvia University of Life Sciences and Technologies, Aleksandras Stulginskis University, Lithuania, Estonian University of Applied Sciences. The students went to the study trip to the company "Ivabalte", an agricultural machinery retailer and maintenenace service provider, the company Mantinga", a producer of frozen bread, and a farm belonging to Aleksandras Stulginskis University. In companies, students had the opportunity to explore in more detail the agricultural supply chain and the relationships between companies within it. On the last day of the BOVA course students presented their research on the methods to promote sustainable agriculture and rural development, which had been developed throughout the week.

If we look at the dynamics of outgoing mobility, the number of mobilities has increased 3 times, with ERASMUS traineeships having the highest growth rate. ERASMUS mobility opportunities are

mainly used by foreign students to study for a semester at European universities or in traineeships. The most popular form of mobility among Masters students has been BOVA courses, where a total of 18 mobility periods have been completed over a six year period. This is due to the fact that this type of mobility is used not only by foreign students but also by Latvian students. BOVA courses are modular, containing specific topics and include practical case studies and training in business environment. Compared to the previous period, the interest of the local students in the possibilities of traineeship abroad has decreased. If during the previous period such traineeships had been used by students, they were no longer used in the reference period. This was due to the insufficient time available for local students and the fact that all students were employed by companies / organizations here in Latvia. Furthermore, many of the students worked in multicultural companies and organizations or in companies with the foreign capital. The recognition of the results acquired in the partnering universities abroad during ERASMUS+ mobility is performed by the director of the study programme according to the Rector's decision "On Academic Recognition Procedure at LLU" (https://www.llu.lv/lv/erasmus-studijas; http://www.llu.lv/lv/erasmus-prakse). The protocol of mobility academic recognition is issued on the basis of the submitted transcript of records (and previously approved academic recognition protocol of intention) or a certificate of the traineeship period.

III - DESCRIPTION OF THE STUDY PROGRAMME (3. Resources and Provision of the Study Programme)

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. Whilst carrying out the assessment, it is possible to refer to the information provided for in the criteria set forth in Part II, Chapter 3, sub-paragraphs 3.1 to 3.3.

Study infrastructure, information sources and facilities, material and technical provision and funding are sufficient and appropriate for the implementation of the study programme and ensure the achievement of the learning outcomes. The implementation of the study programme is based on information sources and facilities, material and technical provision of the university, ESAF and other faculties (see Section 2.3.).

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

III - DESCRIPTION OF THE STUDY PROGRAMME (4. Teaching Staff)

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

The study progamme contains 4.12 staff loads (2.18 (1.5 year programme) and 1.94 (2.0 years programme) based on the LLU academic staff payroll regulation.

Table 5.5

Positions of teaching staff involved in the programme and the volume of the study process, as of 2018/2019

The title of the programme/ teaching staff		Business Management [1.5 years]	Business Management [2 years]
Professor	Study process, h	471.80	471.80
	Number	8	8
Professor (Emeritus)	Study process, h	8.00	0.00
	Number	1	0
Visiting professor	Study process, h	49.50	49.50
	Number	1	1
Associate professor	Study process, h	855.30	616.30
	Number	7	6
Assistant professor	Study process, h	157.40	112.60
	Number	3	4
Visiting assistant professor	Study process, h	62.00	116.00
	Number	3	3
Lecturer	Study process, h	17.60	17.60
	Number	1	1
Visiting lecturer	Study process, h	379.90	409.90
	Number	6	6

Total amount for the study process, h	2001.50	1793.70
Total number of persons	30	29

The information in the table shows that the teaching staff involved in the programme contains 34% of profesors (including prof. Emeritus and visiting professors), 23% associate professors, 20% assistant professors, 23% lecturers. The industry professionals hold the positions of assistant professors and lecturers / visiting lecturers. A larger share of assistant professors and visiting lecturers are in the courses delivered in the English language.

The teaching staff from two faculties of LLU have been involved in the implementation of the study programme: (1) The Faculty of Economics and Social Development, its three institutes (Institute of Business and Management Science, Institute of Economics and Regional Development, Institute of Finance and Accounting), (2) Faculty of Information Technology (Management System Department), as well as teaching staff from the Language Centre. They provide relevant teaching of the study courses, methodological work, design of study programmes as well as ensure the quality of the study process.

Table 5.6.

Positions of teaching staff involved in the programme and the volume of the study process, as of 2018/2019

	Professor	Visiting professor	Asoc.prof.	Assist. professor	Visiting Assist. professor	lecturer	Visiting lecturer	**Total**
Business Management [1.5 years]	0.52	0.07	0.93	0.17	0.07	0.02	0.4	**2.18**
Business Management [2 years]	0.52	0.06	0.67	0.12	0.12	0.02	0.43	**1.94**
Total	**1.04**	**0.13**	**1.6**	**0.29**	**0.19**	**0.04**	**0.83**	**4.12**

Professors and associate professors account for almost 2.77 load, which was positive, because academic staff should have the highest academic qualification level to deliver lectures to master students. Assistant professors and visiting assistant professors account for 0.48 load, and lecturers and visiting lecturers – 0.87 load. Lecturers and visiting lecturers were industry professionals who taught study courses aimed at providing specific professional knowledge and skills. Visiting lecturers (industry professionals) are involved as traineeship supervisors, members of the traineeship commissions and reviewers of master theses. The ratio of elected academic staff to not elected teaching staff is 75% against 25%, which should be evaluated positively; it could be even lower taking into account that researchers, leading researchers and industry professionals also should be involved in the programme. The analysis of the distribution of positions among academic staff shows that 30 academic staff members were involved in the teaching process, including 9 professors, 1 visiting professor, 7 associate professors, 3 assistant professors, 3 visiting assistant professors, 1 lecturer and 6 visiting lecturers.

The changes in the structure of teaching staff were caused by the admission of foreign students in

the reference period which resulted in the increase of work load for guest lectures and lectures. The admission of foreign students noticeably decreased the ratio of students to teaching staff, which fluctuated in the previous period ~ 15.0:16.0 (students/teaching staff). At present the ratio has decreased due to involvement of several members of academic staff, but a weak point is that the rate of load increase is many times lower. This means that the work load is actually even more fragmented among the lecturers involved.

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

The structure of the teaching staff (See Section Analysis and Evaluation of the Changes of Academic Staff) is relevant to ensure the implementation of the study programme in high quality.

Table 5.7

Distribution of teaching staff by qualification level

Indicators	Academic staff					
	2013/14	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
	Doctoral degree					
Number	19	19	21	21	23	23
Share, %	79	79	77	75	76	76
	Master's degree					
Number	6	6	6	7	7	7
Share, %	21	21	23	25	23	23

The position qualifications of teaching staff of the programme "Business Management" in the time period from 2013 to 2019 were rather stable. The majority of teaching staff had a PhD degree (75-79% on average), however, fluctuations have occurred over the last three academic years. The changes were because of the increase of the number of foreign students because more than one teaching staff member started to be involved in delivering one study course.

The necessity and regularity of the professional development of the teaching staff is determined by:

(1)   Law on Institutions of Higher Education of the Republic of Latvia (1995);

(2)   Regulation No. 391 of the Cabinet of Ministers (04.09.2001) "Procedure for assessment of scientific and pedagogical qualification of professor and associate professor", which determines the

procedure by which the Board of Professors of the scientific field assesses scientific and pedagogical qualifications of a candidate for the position of a professor or associate professor, and provides that the scientific and pedagogical qualifications obtained during the last six years shall be taken into account. A component of the pedagogical qualification is organizational competence which characterizes the experience and aleadership abilities of the staff;

(3)   LLU "Regulation on Academic Positions" (http://www.llu.lv/getfile.php?id=66788), which defines the requirements for candidates for academic positions (professor, associate professor, docent, leading researcher, lecturer, researcher and assistant);

The **academic staff** involved in the programme **regularly develop their professional qualification**:

- At least once in six years teaching staff attend professional development programme for university teaching staff "Innovations in Higher Education Didactics" (160 hours). In the time period 2013-2019, the cerificates of the completion of the course were obtained by 5 members.
- LLU employees are entitled to attend professional development courses "Moodle e-course design management system". 7 teaching staff members attended the courses;
- LLU Language Centre offered English language improvement courses (32 h). The courses were attended by 10 members of academic staff;
- Academic staff participated in the annual LLU Academic Conferences. Every year 12 members participate on average and at least one teaching staff member delivers a report in the conference;
- In the reference period several lecturers participated in seminars for professional development arranged by LLU Communication and Marketing Centre: "Be flexible in communication" and by the LLU Lifelong Education centre and Career Consultation centre "Thinking Strategy of Change";
- The faculty arranged events to commemorate the outstanding researchers: the seminar "Professor's Ervids Grinovskis Heritage"; the seminar "Readings to commemorate Assistant Professor Jānis Benze"; the seminar to commemorate Professor's K. Špoģis scientific heritage "The fundamental value of science - diversity" .

The teaching staff obtained the following certificates of the professional development courses:

1. Professional development "Universities' management excellence in 21st century" ; "Investors in Excellence" standard requirements and methods for achieving the excellence; "We and Internet";
2. Professional training and seminars: "Entrepreneurship in Lithaunia: experience, practice and culture heritage" (Lithuania, Aukštaitija, Aukštaitija self-government); "Entrepreneurship in Southern Estonia: Experience, Practice and Cultural Heritage"; "North Latgale Region's Experience, Practice and Cultural Heritage "; "Business Development in Vidzeme".

Members of teaching staff participated in seminars and activities organized by various professional organizations: "LZRA Education Centre" Ltd., "Zemgale Regional Competence Development Centre", LR Ministry of Finances, "New Law", Ltd, Business Information Service, iFinanses, Zemgale Entrepreneurship Centre.

The teaching staff with their competence and experience successfully work in the boards of various institutions and companies, which in turn provides a better understanding of different economic processes and creates good opportunities for participation in various scientific research activities. The academic staff involved in the implementation of the study direction will continue to develop their professional, academic, scientific or social competences.

4.3. Information on the number of the scientific publications of the academic staff members, involved in the implementation of the 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 may be additionally specified (if applicable).

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).

4.5. Provide examples of the involvement of the academic staff in the scientific research and/or artistic creation activities both at national and at international level (in the fields related to the content of the study programme), as well as the use of the obtained information in the study process.

Scientific research activity of the academic staff is reflected in scientific publications and presentations of their results at conferences and scientific seminars, as well as participation in the research projects.

Table 5.8

Scientific and research activities of teaching staff involved in the study programme "Business Management"

Indicators	Academic year					
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Number of publications	32	35	38	38	38	41

Indicators	Academic year					
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Study courses which have integrated the results of research projects and practical research activities in their content	2	3	4	4	4	4
Course books and scientific monographs	1	1	0	0	5	2

1. Latvijas pārtikas nozares konkurētspējas rādītāju salīdzinošā analīze Latvijā, Lietuvā, Igaunijā, Polijā un Krievijā (in English: Comparative analysis of competitiveness indicators of Latvian food industry in Latvia, Lithuania, Estonia, Poland and Russia. (2014) A group of authors. A scientific monograph. Jelgava: LLU, Drukātava, Ltd, pp 200. ISBN 978-9984-48-156-2.
2. Grīnberga-Zālīte G. (2014) Sociālais mārketings lauku iedzīvotāju interešu harmonizācijai (in English: Social marketing to harmonize the interests of rural population. Latvijas Lauksaimniecības universitāte, CD, pp. 46.
3. Zināšanu ekonomika Latvijas lauku un reģionu dzīvotspējai (in English: Knowledge Economy for the Viability of Latvian Countryside and Regions). (2018) A group of authors. A monograph. Jelgava: Jelgavas tipogrāfija. 2018. pp. 325. ISBN 978-9934-8744-0-6.
4. Simtam pāri. Viedā Latvija (In English: More than 100. Smart Latvia) (2018) A group of authors. A monograph. Jelgava: Jelgavas tipogrāfija. 2018. pp.416. ISBN 978-9984-9542-9-5.
5. Entrepreneurship in Rural Areas through the production and exploitation of medicinal and aromatic plants: manual /D.M.Bobiţ, M.Ciufu, V.Ghinea,, L.Līcīte, A.Muška, L.Paula, D.Popluga u.c./ [Jelgava]: [Latvijas Lauksaimniecības universitāte], [2018] pp.255. ISBN 9789984482958.
6. Education in rural entrepreneurship through producing and valorizing herbs that are endangered or available only from spontaneous flora: training course curriculum/ D.Popluga, A.Muška, L.Paula, L.Līcīte/ [Jelgava]: [Latvijas Lauksaimniecības universitāte], [2018] pp. 33.
7. Siltumnīcefekta gāzu emisiju samazināšanas iespējas ar klimatam draudzīgu lauksaimniecību un mežsaimniecību Latvijā (in English: Greenhouse Gas Emission Reduction Possibilities in Climate-Friendly Agriculture and Forestry in Latvia) (2018) A group of authors. A monograph. Rīga: SIA "Zelta rudens Printing", pp.289.ISBN: 978-9984-48-308-5.
8. Ekonomikas un sabiedrības attīstības fakultāte: docētāju devums Latvijai: 1968-50-2018 / Latvijas Lauksaimniecības universitāte. (In English: Faculty of Economics and Social Development: Academic Staff's Contribution to LLU) Jelgava : Latvijas Lauksaimniecības universitāte, 2019. ISBN 9789984483092
9. Ekonomikas un sabiedrības attīstības fakultāte 1/2 no 100: 2014.-2018. gads / ESAF. – (In English: Faculty of Economics and Social Development ½ from 100) Jelgava : Latvijas Lauksaimniecības universitāte, 2019. ISBN 9789984483122

The majority of teaching staff (14) members have participated and managed **scientific and**

research projects, the results of which were integrated in the content of the study courses. The most important projects and practical research activities in the period 2014.-2019:

- The project "Economically efficient, sustainable and productive use of land for agricultural and forestry production" financed by "Latvijas valsts meži", Plc, No.05-15/8; 5.5.-5.1-0015-101-13-18;
- The national research programme's EKOSOC-LV project 5.2.3 "Latvian rural and regional development processes and opportunities in the context of the knowledge economy",
- The first priority national research programme "Environment and Climate", Programme 1.2. "Value and dynamics of Latvian ecosystems under the climate change (EVIDEnT). Sub-project Agricultural sector GHG emissions analysis and economic assessment of emission reduction measures".
- The national research programme " Latvian Heritage and Future Challenges for National Sustainability ", 3rd projects " Challenges and Solutions of the Latvian State and Society in the International Context " (INTERFRAME-LV);
- Horizon 2020, H2020-BB-2016-2017 6-2017. 773297-2 Bio-based innovation for sustainable goods and services - Supporting the development of a European Bioeconomy. Monitoring the Bioeconomy (BioMonitor);
- The project of Latvian Association of Local and Regional Governments "Local authorities - promoters of development education and public awareness";
- OECD research project "Intellectual services related to the preparation of the Latvian Agricultural Innovation System Report" (no.3.2-10/2017/LLU/82);
- INTERREG Central Baltics project "Development of Metacluster to Attract Japanese Tourism Market – CAITO" No. CB340;
- INTERREG V-A LATVIA - LITHUANIA PROGRAMME 2014-2020 Project Number: LLI-143; Project Title: "Ready for Business / ReforB";
- ERASMUS+ project "Education in Rural Entrepreneurship by Producing and Evaluating Medicinal and Aromatic Plants";
- "INTENSSS-PA: "Integrated, Sustainable Energy Planning ", the study of alternative energy use in transport in Zemgale region;
- The project of the Ministry of Agriculture "Socio-economic evaluation of development scenarios of Latvian bioeconomy sectors"

A number of teaching staff members (9 persons) have participated in **science promotion activities** on the following topics: *Sustainable development solutions: from well-established waste management to healthy products; Current trends in the world economy; The stories of LLU scientists: To Buy or Not to Buy – Such Is the Question!"; We and Internet; Monitoring of social charity organizations; Experience of using electric vehicles in Latvia; Compliance of Latvian, Estonian and Finnish Rural Tourism Products with the Requirements of the Japanese Tourism Market; Informative Educational Event "Have a different view!"; European Researchers' Night etc.*

4.6. 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 courses/ modules. Specify also the proportion of the number of the students and the teaching staff within the study programme (at the moment of the submission of the Self-Assessment Report).

The cooperation of teaching staff occurs:

- during the implementation of the study courses when more than one member is involved in teaching (*Finance and Investment Management; Mathematical statistics; Business Planning and Controlling; Knowledge Management and Innovation*);
- during the staff meetings of institutes, inter-institutes, methodological commissions, the board meetings of the faculty, when the study process is planned and discussed;
- during the work of traineeship defence commissions and state examination commissions, where teaching staff members of different institutes and other higher education institutions are involved.

Table5.9.

The ratio of teaching staff to students in the study programme "Business Management"

Title of the programme	Level	Number of students 01.10.2019	Students / Teaching staff
Business Management [1.5 years]	Prof. master	21	9.6
Business Management [2 years]	Prof. master	21	10.8
Average ratio at LLU :			13.4

Annexes

III. Description of the Study Programme - 1. Indicators Describing the Study Programme		
Compliance of the joint study programme with the provisions of the Law on Institutions of Higher Education (table)		
Statistics on the students over the reporting period	Annex_13.pdf	13_pielikums _LV.pdf
III. Description of the Study Programme - 2. The Content of Studies and Implementation Thereof		
Compliance of the study programme with the State Education Standard	Annex_14_EN.pdf	14_pielikums_LV.pdf
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard (if applicable)	Annex_15.pdf	15_pielikums_LV.pdf
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)		
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	Annex_17.pdf	17_pielikums.pdf
Curriculum of the study programme (for each type and form of the implementation of the study programme)	Annex_18.pdf	18_pielikums_LV.pdf
Descriptions of the study courses/ modules	Description_of_the_study_courses.rar	Studiju_kursu_apraksti.rar
Description of the Study Direction - Other mandatory attachments		
Sample of the diploma to be issued for the acquisition of the study programme.	Professional_master_diploma and supplement.rar	Profesionālā_maģistra_diploms un pielikums.rar
Description of the Study Programme - Other mandatory attachments		
Document confirming that the higher education institution/ college will provide the students with the options to continue the acquisition of education in another study programme or at another higher education institution/ college (a contract with another accredited higher education institution/ college), in case the implementation of the study programme is discontinued	Agreement_between_LLU_RTU and LLU_LiepU.rar	Vienošanās_LLU_RTU_un LLU_Liepājas Universitāte.rar
Document confirming that the higher education institution/ college guarantees to the students a compensation for losses if the study programme is not accredited or the licence of the study programme is revoked due to the actions of the higher education institution/ college (actions or failure to act) and the student does not wish to continue the studies in another study programme	LLU confirmation_Business Management.docx	LLU_apliecinajums_programmai_Uznemejdarbibas _vadiba.edoc
Confirmation of the higher education institution/ college that the teaching staff members to be involved in the implementation of the study programme have at least B2-level knowledge of a related foreign language according to European language levels (see the levels under www.europass.lv), if the study programme or any part thereof is to be implemented in a foreign language.	LLU confirmation_Business Management.docx	LLU_apliecinajums_programmai_Uznemejdarbibas _vadiba.edoc
If the study programmes in the study direction subject to the assessment are doctoral study programmes, a confirmation that at least five teaching staff members with doctoral degree are among the academic staff of a doctoral study programme, at least three of which are experts approved by the Latvian Science Council in the respective field or sub-field of science, in which the study programme has intended to award a scientific degree.		
If academic study programmes are implemented within the study direction, a document confirming that the academic staff of the academic study programme complies with the provisions set out in Section 55, Paragraph one, Clause three of the Law on Institutions of Higher Education		
Sample (or samples) of the study agreement	Studiju_ligums_paraugs_EN.pdf	Studiju_ligums_paraugs_LV.pdf
If academic study programmes for less than 250 full-time students are implemented within the study direction, the opinion of the Council for Higher Education shall be attached in compliance with Section 55, Paragraph two of the Law on Institutions of Higher Education.		

Entrepreneurship and Business Management

Title of the higher education institution	*Management, Administration and Management of Real Property*
ProcedureStudyProgram.Name	*Entrepreneurship and Business Management*
Education classification code	*42345*
Type of the study programme	*Professional bachelor study programme*
Name of the study programme director	*Aina*
Surname of the study programme director	*Muška*
E-mail of the study programme director	*aina.muska@llu.lv*
Title of the study programme director	*Dr.oec*
Phone of the study programme director	*63025170*
Goal of the study programme	*To educate skilled, competitive professional entrepreneurs and business managers who, by obtaining a high quality higher professional education, are able to analyze and assess the commercial environment, plan and manage work in line with the company's development strategy and the aims set in accordance with the requirements of the laws and regulations enactments and the trends of the national economy.*
Tasks of the study programme	*(1) To develop a wide range of knowledge and understanding of business activities and business management, to promote the skills and competences of the business manager according to labor market requirements.* *(2) To prepare students for practical work, develop research skills and encourage their use.* *(3) To develop and strengthen self-education and character building skills, provide the basis for lifelong learning.*

Results of the study programme	Knowledge: Students are: (Z1) able to demonstrate knowledge of the regularities of economic development in the world. (Z2) able to demonstrate the highest level of knowledge that provides the basis for implementation of successful management process. (Z3) able to demonstrate specialized knowledge of the correlation between business activities and the decision-making cycle. (Z4) able to demonstrate knowledge and critical understanding of theoretical and empirical research in management science. (Z5) able to demonstrate knowledge of research methods and methods of business environment analysis for management process. (Z6) able to demonstrate knowledge of the laws and regulations governing business activities. Skills: Students are: (P1) able to accumulate and apply the acquired knowledge in the management process. (P2) able to understand the regularities and principles of current economic development, as well as the relationships of the company's activities. (P3) Students are familiar with the processes taking place in the business environment, they are able to explain them, discuss them with arguments and make decisions according to the changes in the situation. (P4) Students know and monitor a company's functions, students are able to identify problems and provide solutions using a scientific approach, and students are able to make decisions. (P5) able to work in a team, delegate and coordinate responsibilities, effectively plan and organize work, and manage conflict situations. (P6) able to communicate and collaborate with business entities and customers. (P7) able to continuously acquire new knowledge, analyze, systematize, synthesize and integrate acquired information. (P8) Students are aware and observe rules and regulations and ethical norms. Competences: Students are: (K1) able to use theoretical and practical knowledge and skills to effectively manage a company and its departments. (K2) able to develop strategic and tactical plans of the company according to the economic development trends, interests of the state, owners and the society. (K3) able to work individually and in a group, use their knowledge and leadership skills and take responsibility for their performance. (K4) able to collaborate with business entities and customers to achieve business goals. (K5) able to represent the company in deals with other business entities and customers. (K6) able to communicate in the local and international business environment. (K7) able to conduct research activities with a scientific value in the field of management science.

Final examination upon the completion of the study programme	Bachelor thesis (12 CP/ 18 ECTS)

Study programme forms

Full time studies - 4 years - latvian

Study type and form	Full time studies
Duration in full years	4
Duration in month	0
Language	latvian
Amount (CP)	160
Admission requirements (in English)	General secondary education or vocational secondary education
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	Professional Bachelor in Entrepreneurship and Business Management
Qualification to be obtained (in english)	Business Manager

Places of implementation

Place name	City	Address
Latvia University of Life Sciences and Technologies	JELGAVA	LIELĀ IELA 2, JELGAVA, LV-3001

Part time studies - 4 years, 6 months - latvian

Study type and form	Part time studies
Duration in full years	4
Duration in month	6
Language	latvian
Amount (CP)	160
Admission requirements (in English)	General secondary education or vocational secondary education
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	Professional Bachelor in Entrepreneurship and Business Management
Qualification to be obtained (in english)	Business Manager

Places of implementation

Place name	City	Address
Latvia University of Life Sciences and Technologies	JELGAVA	LIELĀ IELA 2, JELGAVA, LV-3001

III - DESCRIPTION OF THE STUDY PROGRAMME (1. Indicators Describing the Study Programme)

1.1. Description and analysis of changes in study programme parameters that have taken place since the issue of the previous accreditation certificate of study direction or the license of study programme if study programme is not included in the accreditation page of the study direction

In the period since the last accreditation certificate for the field of study has been issued, the following changes have been made in two parameters of the programme Entrepreneurship and Business Management:

1. In accordance with Cabinet regulation No. 512 of 26 August 2014 *Regulations regarding the National Standard for Second Level Professional Higher Education*, the workload of the programme for full- and part-time studies is **160 CP**. According to the LLU Senate Decision No 7–166, full-time students are required to participate in the "Sport" study course (3 CP) and the traineeship "Practical farm" (1 CP) in LLU MPS "Vecauce" (with the purpose to acquire practical farming in the countryside).
2. The programme is not delivered in the form of **part-time extramural studies** because students did not prefer this form of studies.
3. The professional qualification to be awarded – a **business manager** – was made precise in accordance with the *National Professional Standard for **Business Managers*** (agreed at the 18 September 2019 meeting of the Tripartite Cooperation Sub-council for Professional Education and Employment; Protocol No. 6).

1.2. Analysis and assessment of the 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 in the different study forms, types, and languages.

The study programme "Entrepreneurship and Business Management" is implemented in the official state language. No significant changes have occurred in the total number of students during the reference period, and the total number of students in the last two years of study has levelled off (see Annex 13). During the reference period the growth rate of the total number of students in comparison with the previous year had a positive dynamics in the study programme "Entrepreneurship and Business Management": an average increase of 1% during the reference period. Overall, the number of students in Latvian universities has been gradually decreasing, for example, in universities of Latvia during the reference period there was an average decrease of 6% in the number of students **in professional undergraduate** programmes, which was due to the demographic crisis in the country, which caused a decrease in the number of secondary school graduates.

A stable number of students can be explained by the recognisability and the location of LLU. The student survey data of the study programme show that 37% of respondents on average selected

LLU in the reference period because the university was close to their place of residence and 30% on average because LLU was located in Jelgava. In particular, the proximity of LLU to the place of residence and their workplace was important for 77% of the total number of part-time students on average in the reference period.

The changes in the number of students was influenced by:

– **the number of immatriculated students**;

The trend of changes in the number of immatriculated students in the study programme "Entrepreneurship and Business Management" was identical to the changes in the number of immatriculated students in professional undergraduate study programmes in higher education institutions of Latvia: the number of students enrolled in the first year has been decreasing. An increase in the number of full-time immatriculated students in academic years of 2017/18 and 2018/19 (by 67% and 50%, respectively) was enhanced by the allocation of state financed places in the study programme "Entrepreneurship and Business Management".

- **the number of students leaving studies**;

Most students (during the reference period 62% of the total number of exmatriculated ones) were exmatriculated in the first academic year of their studies, and the number of exmatriculated students has gradually decreased with each next year: during the reference period, in the 4th and 5th year of their studies 6% of the total number of exmatriculated students on average discontinued studies in each study year. The main reasons for discontinuing the studies were:

(1) at a student's own request (33% of total exmatriculated ones; mainly during the 1st year), because a study programme was not selected correctly; the programme did not meet the expectations; studying conditions; dissatisfied with a schedule; inability to spend enough time for studying; family conditions;

(2) failure to fulfil the requirements of the study agreement, not being able to meet financial obligations (22% of the total number; also mainly during the 1st year);

(3) failure to fulfil the requirements of the study agreement, failure to comply with the requirements of the study programme (19% of the total number; also mainly during the 1st year);

(4) without starting studies (15% of total exmatriculated ones).

Part of the students were exmatriculated with the written statement "not returned from academic leave" (10%). To reduce the number of dropouts, all students, who had submitted a written application for exmatriculation, were invited for an interview either with the dean or the vice-dean for studies or the director of the study programme.

The total number of full-time students was not significantly affected by the fact that a student changed the mode of studies from full-time studies to part-time studies, if he/she decided to apply for a job and it could not be combined with full-time studies. Also, students who were good sportsmen changed the mode if they could not combine full-time studies with training anymore after they had changed a sports club.

- **the number of students starting studies at later stages of study.**

Students started studies in the programme at the later stages of study, mostly after graduating from the 1st level higher education study programmes, or by changing the higher education institutions or a study programme.

Table 4.1.

The number of students immatriculated at later stages of the studies in the reference period

Immatriculation semester	Academic year					
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
2.	2	1		1		1
3.	1		6	1	1	2
4.		1				
5.	5	1		1	5	3
6.		4	5	4	4	1
7.	8	15	7			
8.						
9.	3	2				
Total	**21**	**24**	**18**	**7**	**10**	**5**
including after graduation of the study programme "Business Studies"	4	9	6	4	2	0

Studies in later stages were commenced mainly by the graduates of the Accounting and Financial College, Business College of Latvia, Business Management College, College of Law, Albert College and Riga Teacher Training and Educational Management Academy, as well as graduates included in the 1st level higher education study programme "Business Studies". In 2013/2014 the increase in the number of immatriculated students at later stages was affected by the closure of the professional bachelor's degree programme "Public Administration", therefore part of the students continued their studies in the programme "Entrepreneurship and Business Management". As regards 2014/2015, the increase in the number of immatriculated students was determined by the graduates of the "Business Studies" study programme: the majority continued their studies in the "Entrepreneurship and Business Management" programme.

54 full-time students and 132 part-time students graduated from the study programme in the reference period. The analysis of data shows that the ratio of graduations/enrollments during the reference period is **61% on average in full-time studies and 66% on average in part-time studies.** The expectations of the plan were fulfilled in the reference period. In fact, the bachelor theses were written and defended by **91%** of full-time students in the 4th year **on average** and **94%** of the total number of part-time students in the 5th year **on average**.

By 2017/2016 both full-time and part-time students financed their studies either by themselves or

their studies were financed by legal entities on the basis of an agreement with LLU. Starting from 2017/18, state-financed places were allocated for the study programme: **11 places** in 2017/18 and **16 places** in 2018/19. The right to study in state-financed study places for a period of one semester is granted to the full-time students with a higher weighted average grade per semester according to the available number of state-financed study places. Since the number of students has levelled off in the last two years, but the number of state-financed study places has increased by 5 places, the proportion of students who were studying for public funds also increased from 6% in 2017/18 to 9% in 2018/19. It should be noted that more than 90% of students in the study programme were fee-paying students since the majority of students in the programme were part-time students who financed their studies by themselves.

The study loan is available for full-time and part-time students to cover tuition fees. Full-time successful students have an access to study fee discounts in accordance with the procedures included in the regulation of LLU Senate.

1.3. Analysis and assessment of the interrelation between the name of the study programme, the degree or professional qualification to be acquired or the degree and professional qualification to be acquired, the aims, objectives, learning outcomes, and the admission requirements.

The analysis of the aim, tasks and admission requirements described in section "Program parameters" shows that they follow from one another logically and are interrelated. The admission requirements are relevant and sufficient to achieve the learning outcomes in the appropriate quality in the expected duration; the admission of students is conducted according to the procedure and criteria approved by LLU.

The learning outcomes corresponds to the aim and tasks of the programme, the content of the programme. The title of the programme corresponds to its content. The professional bachelor's degree and professional qualification are dependent on learning outcomes and the content of the study programme.

III - DESCRIPTION OF THE STUDY PROGRAMME (2. The Content of Studies and Implementation Thereof)

2.1. Assessment of the relevance of the content of the study course/ module and the compliance with the needs of the relevant industry and labour market and with the trends in science. Provide information on how and whether the content of the study course/ module is updated in line with the development trends of the relevant industry, labour market, and science. In 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.

The content of the study programme provides the training of high professional level, competitive management professionals for various sectors and fields of the national economy, as well as for institutions and organisations that operate on a commercial basis, as well as the training of professionals, entrepreneurs, to start up and run a private business.

The content and structure of the study programme corresponds to the requirements of the Regulation No512 of the Cabinet of Ministers "Regulation on the state standard of the 2nd level professional higher education" (see Annex 14)

The content of the study courses has been regularly reviewed and updated in line with the requirements of industry, labour market and scientific trends. The relevant and updated content of the study courses following the latest developments of the industry is ensured by:

- scientific activities of academic staff and regular participation in scientific conferences thus strengthening the link between education and research;
- involvement of academic staff in research projects, thus strengthening the link between education, research and often entrepreneurship;
- in-service training activities, seminars, courses that provide opportunities and motivation for academic staff to improve their professionalism, as well as to diversify teaching methods and review the content of study courses;
- participation of academic staff members in the *ERASMUS+* mobility programme, exchange of pedagogical methods and teaching aids;
- activities and participation of academic staff members in the boards and commissions of various institutions and companies to better understand different economic and social processes, thus ensuring the link between education and business.

In addition, the study courses are reviewed according to:

- LLU regulations (the decision of the LLU Vice-rector for Studies "*On procedures for the reviewing of study courses/traineeship programmes and recording and updating information in LLU IS Course Registrar*), which determines that **the study course / traineeship programme should be reviewed and updated at least once every two years** during self-evaluation of the study programme, updating it with the latest data and information;
- initiative of the director of the study programme;
- initiative of the teaching staff of the study course;
- recommendations expressed in student surveys;
- recommendations expressed by employers in surveys and during evaluation of the study programme as well as during the defence of bachelor theses as suggestions which are summarized and included in the report of the State Examination Commission (twice per academic year).

The director of the study program summarizes the proposals made by students and employers regarding the necessary changes in the content of the study course and informs the responsible lecturer, who is obliged to review the content of the study course and integrate the proposals.

At the end of each academic year a survey of the students of the study programme was conducted to find out students' opinions regarding the compatibility of the study programme with the labor market requirements. During the reference period, 35% of respondents on average stated that the study programme **corresponded to the labour market** demands and 40% on average said that it **partially corresponded to the labor market** demands. During the reference period the share of respondents holding the opinion that the programme corresponded to the requirements of the labour market increased from 29 % in 2013/14 to 48 % in 2018/19. 19% of respondents on average considered it difficult to evaluate the programme's compatibility since they considered that the

labour market was very changeable.

The programme's graduate survey showed that the majority of respondents were satisfied with the offer of study courses in the study programme: in the reference period 29 % of respondents on average **fully agreed** with the statement "*I am satisfied with the offer of study courses in the programme*" and 64% on average **rather agreed** with this statement. The respondents highly evaluated the quality of study courses and topicality of the content. 18% of respondents on average **fully agreed** with the statement *"On the whole, the quality of the study courses was high, the content of the courses up-to-date and versatile"* and 67% on average **rather agreed** with this statement.

The evaluation of theoretical knowledge shows that 21% of graduates on average **fully agreed** with the statement: *"I am satisfied with the acquired theoretical knowledge",* and 71% on average **rather agreed** with this statement. Likewise, graduates evaluated skills. 21% of graduates on average **fully agreed** with the statement *"I acquired sufficient skills during the study process to apply them in for conduction practical tasks"* and 67% on average **rather agreed** with this statement.

The majority of graduates (72% of respondents) hold the opinion that the difficulty level of the programme was "**appropriate**".

Each year employers rate students' professional suitability for the labour market according to a five-point scale (see Fig 4.1.) In the last years of the reference period the employers' rating slightly increased.
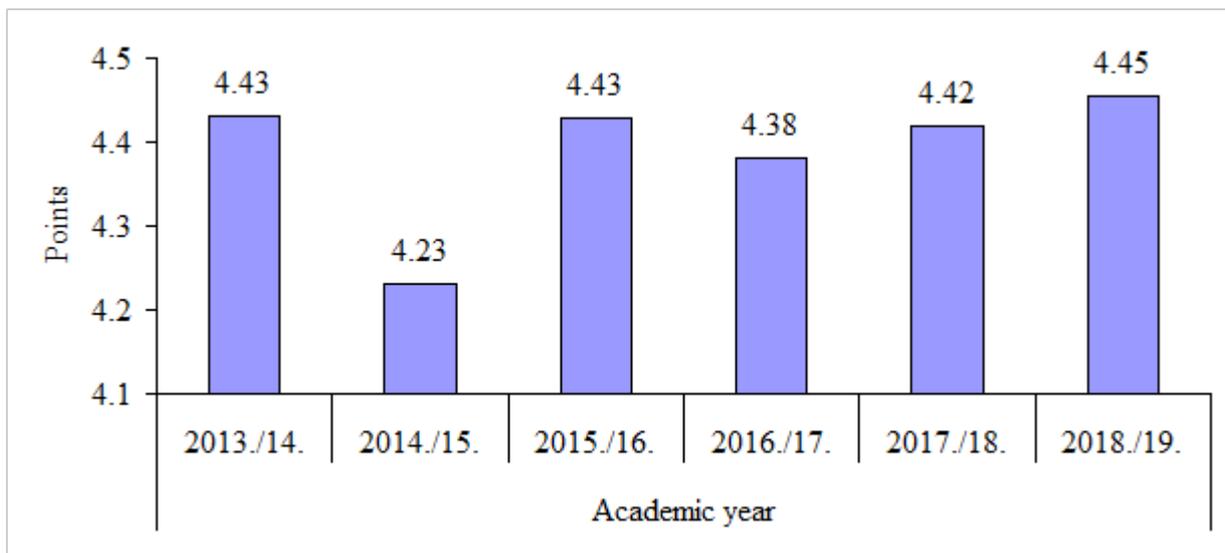
Fig. 4.1. **Employers' opinion regarding students' professional suitability for the labour market (5 – high level; 1 – low level)**

2.2. Assessment of the interrelation between the information included in the study courses/ modules, the intended learning outcomes, the set aims and other indicators, the relation between the aims of the study course/ module and the aims and intended outcomes of the study programme. In 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.

The planning of the study programme, the content of the study courses, the distribution of credit points is of good quality and corresponds to the aim, tasks and learning outcomes of the study programme.

The content of study courses, learning outcomes, tasks and aims are dependent on the study programme's learning outcomes, tasks and aims. The mutual linked study courses ensure the achievement of the expected learning outcomes according to the required quality (see Annex 17).

2.3. Assessment of the study implementation methods (including the evaluation methods) by providing the analysis of how the study implementation methods (including the evaluation methods) used in the study courses/ modules are selected, what they are, and how they contribute to the achievement of the learning outcomes of the study courses and the aims of the study programme. Provide an explanation of how the student-centred principles are taken into account in the implementation of the study process.

The choice of didactic methods in the study programme is based on:

- the aim, tasks, learning outcomes of the study programme;
- the aim and learning outcomes of each specific study course;
- the specific content of the study course, as well as the subject field;
- options for studies, diverse needs of a student;
- study environment: available study infrastructure, information sources and facilities, material and technical provision;
- contribution of academic staff in conducting the study process.

Implementation of student-centred learning by the academic staff members is based on a wide range of teaching methods:

- **traditional methods:** lectures, practical classes, seminars;
- **methods that facilitate analytical, critical, systemic and creative thinking, develop communication skills:** group work, discussions, debates, presentations, case studies and modelling, problem solving, study trips, role plays, etc.;
- **methods of student individual and group work facilitating research activities:** reports, essays, home tasks, educational research, the final research project, development of course works;
- **meetings with visiting experts, industry professionals** in the framework of study courses and *ESAF Graduate Week events*.

Academic staff members apply a variety of teaching methods. Three prevailing methods used in addition to lectures were **discussions** (used in 81% of the total number of study courses), **practical classes individually and in groups** (65%) and **presentations** (59%).

Lectures as the basic method were used both in general and field study courses and in professional specialization courses. The lecturers used multimedia technologies and the Internet in the lectures. Lecture materials and sources for students were available in the e-study environment for students to prepare in advance that made it possible to focus on the analysis, evaluation and discussion of the theoretical material during classes.

In addition, **guest lectures** were arranged to improve the quality of the study process, which entitled delivering lectures by specialists from different sectors, for example, in the following study

courses:

- *Finances and Credit* (The chairman of the board of the credit union "Allažu saime" (2014/2015); "Swedbank", Plc, Head of Consumption and Car Financing department in Latvia (2017/2018); "Swedbank", Plc, Head of Customer Service department of Jelgava branch (2017/2018)),
- *Macroeconomics* (Investment and Development Agency of Latvia, Head of Customer Service department (2016/2017)),
- *Marketing* ("Latvijas Piens", Ltd, Marketing and Sales director (2016/2017)),
- *Personnel Management* ("Latvenergo", Plc, IT Infrastructure director (2016/2017); Vice-director of Rundale palace museum (2018/2019)),
- *Quality Management* ("Accenture Latvija", Ltd., an employee (2017/2018); "Accenture Latvija", Ltd., employees (2018/2019)),
- *Project Management* ("Accenture Latvija", Ltd, an employee (2017/2018)),
- *Business Economics* and *Entrepreneurship Legislation* (Chief tax inspector of State Revenue Service (2017/2018)),
- *Economic Management Studies* ("Certification and Testing Centre", Ltd, an expert of ecological farming (2018/2019)),
- *Events Management* (Head of LLU Student club (2018/2019)),
- *Management* (Vice-director of the Rundale palace museum (2018/2019)),
- *Financial Management* (Financial institution "ALTUM", a project manager (2018/2019)).

The student survey results give evidence that 58% of students consider that guest lecturers contributed to their understanding of application of theories to practice, but 17% on average have an opposite opinion, and 25% on average were not sure regarding the contribution of guest lecturers.

Furthermore, 22% of the graduates of the programme **fully agreed** with the statement "*The number of guest lecturers was sufficient*", but 60 % **rather agreed** and only 14 % **rather disagreed**.

International Week programme included **guest lectures** from LLU partner universities form other countries.

In practical classes students strengthened theoretical knowledge learned during the lectures and acquired skills in applying various methods in practice, developing an understanding of the different regularities in business processes based on theoretical knowledge and critical thinking. Handouts for this purpose had been worked out, for example, in Economic Management Studies, Project Management, Quality Management, Management etc.

Group work is one of the teaching methods during lectures and practical classes. Group work develops team work, communication and presentation skills as well as the skills not only to perform tasks in a team and take responsibility, but also delegate work activities and control the process.

The discussion method was widely used in the study process. Students actively got involved in the discussions and provided arguments to support their opinion. The discussion method stimulates students "thinking process", which helps to deepen students' understanding of the theories studied during lectures and practical classes. Another useful technique, **the debate method,** was used by the following four study courses (*Sociology, Team Management, Economic Management Studies, Rural Tourism Business*). During the debate method students developed their confidence, speaking skills, and they were able to understand more clearly the relationships among different processes. Eight study courses (*Labour and Civil Protection, Business Law, Quality Management, Innovation Management, Personnel Management, Catering Organization and Service, Latvian Culture*

Environment, Customer Relationship Management) included **the method of seminars** which encouraged students to acquire and develop independent work skills thus encouraging self-education not only during their studies, but also later on after the graduation. In addition, seminars provided opportunities for students to develop induction and deduction skills, therefore they were able to select the most appropriate sources of information, data and facts to prepare a talk on the topics under discussion. The knowledge of content of other study courses, IT skills, ability to work individually and in groups enhanced the skills and quality of independent work which played an important role in seminars.

The study courses *Macroeconomics, Management* and *Conflict Management in Enterprises* applied **the method of situation modelling**, when students modelled real situations, presented them to others and substantiated their point of view. In order to achieve more accurate modelling results, it is necessary to take into account the knowledge acquired in all study courses, as well as to be able to see the regularities arising from the decisions made.

The study courses of *Business Ethics, Etiquette, Marketing, Tourism Legal Order, Market Analysis and Forecasting, Quality Management, E-Commerce, Latvian Culture Environment, Competition in Entrepreneurship* and *Conflict Management in Enterprises* used **the case study method**, the aim of which was to apply the acquired knowledge in practice by solving various real situations, to acquire skills to analyze, to make conclusions, to form recommendations.

Role plays as teaching method was used in the study courses *Business English and Business German, Sociology* and *Legal Basis*, which provided opportunities for students to apply the acquired knowledge in practice, solve different problems and analyse real-life situations.

The method of **Portfolio** was used in four study courses: *Marketing, Globalization of Business, Macroeconomics* and *Economic Management Studies*. Students collected factual materials and completed works during the course in the portfolio, which reflected students' progress, growth, achievements, skills and attitude.

Study trips for students were arranged with the purpose to meet, communicate, participate in discussions with industry professionals and businessmen, to obtain the latest information needed to acquire the content of study courses. During the reference period students of the study programme visited such organizations and entrepreneurs:

- Latvian Rural and Advisory and Training Centre (Ozolnieki) (the study course *Economic Management Studies* (2018/2019)),
- Jelgava Business Incubator (*Innovation Management* (2018/2019)),
- The Bank of Latvia (*Macroeconomics* (2018/2019)),
- The wine making company "Ābelītes", the beer brewery "Zoltners", the ostrich farm "Mazzariņi" (*Microeconomics* (2018/2019)),
- Zemgale Region Competence Development centre (*Introduction into Studies* (2018/2019)),
- "DINEX Latvia", Ltd, (*Financial Management* (2018/2019)),
- Financial institution "ALTUM" (*Business Planning*; 2017/2018; *Financial Management* (2018/2019)),
- Jelgava Tourism un information centre (*Tourism Analysis and Economics* (2018/2019)),
- "Kurekss", Ltd, Ventspils Technical School, Ventspils High Technology Park (*Introduction into Studies* (2018/2019)),
- "Riga Port" and "*Systems Logistics*", Ltd (*Logistics in Marketing* (2017/2018)),
- "*Madara Cosmetics*", Ltd (*Marketing* (2017/2018)),
- Zemgale Planning Region Business centre (*Tourism Legal Order* (2017/2018)),
- "Gamma - A", Ltd and "Laima", Plc (*Advertising Management* (2017/2018)),
- Jelgava Business Incubator (*Innovation Management* (2017/2018)),

- "Lāči", Ltd (*Globalization of Business* (2017/2018)),
- „Karameļu darbnīca", Ltd (*Introduction into Studies* (2016/2017)),
- The farm "Blūdži", Eleja Tea House, Lielvircava manor (*EU Project Management* (2016/2017)),
- State Revenue Service (Riga) (*Finances and Credit* (2016/2017)),
- "JP Ziedi", Ltd (*EU Project Management* (2016/2017)),
- Riga Port, "*System Logistics*", Ltd, (*Logistics in Marketing* (2015/2016)).

Information technologies are used in the study process to develop IT application skills, to follow the format requirements of course works and other works appropriately, to present and to find information, to use databases, to use software and e-resources in research activities and study process**.**

To ensure the application of the principles of student-centred learning, the academic staff members were entitled to provide **tutorials** (according to the approved schedule, which was available in the ESAF website, LLU IS and the e-learning platform, as well in the departments and institutions). The amount of tutorials available to students were sufficient; in addition, students had opportunities to arrange meetings with academic staff members at another time on an individual basis. Students had the opportunity to communicate in e-environment by using LLU unified e-mail system, and they used in e-learning environment in certain study courses. Direct communication was highly valued by students for acquiring knowledge and skills, and e-environment was used for communication for organizational issues by submitting individual works as well as in the framework of *ERASMUS+* programme while abroad.

Students acquire practical skills in the development of individual research while working on **course works, traineeship reports and bachelor thesis.** Students expand and systematize theoretical knowledge and acquire the skills to apply it in researching the chosen topic, defining problems and making reasonable conclusions and recommendations.

The selected methods of the implementation of the study process ensured the achievement of learning outcomes of the study programme and the respective study course.

Students' opinion on the implementation quality of the study courses is found out at the end of each academic year by conducting the survey among the students of the study programme.

As regards the performance of academic staff, the majority of the respondents or 72% on average considered that the performance was **"excellent"** and **"good",** but 24% on average evaluated the performance of the academic staff as "**satisfactory**".

As regards the knowledge of the academic staff, 76% of respondents on average considered that the knowledge was **"excellent"** and **"good",** but 14% evaluated the knowledge of the academic staff as "**satisfactory**". 79 % of respondents on average were satisfied with lecturers' fairness, consistency and demands.

The evaluation of the learning outcomes is an integral part of the study process. Its aim is to evaluate the learning outcomes of individual tasks, part of the course or the whole course, and to determine the qualitative assessment of the learning outcomes. It provides feedback which allows evaluate not only the level of students' knowledge and skills but also the quality of the study process on the whole.

The assessment system is based on the following principles in order to implement student-centred learning in the study programme:

- **the assessment is mandatory** – the requirement is to obtain a positive assessment in each study course; the amount of completed credit points is added to the amount of previously

obtained credits only if the course, traineeship, course work, bachelor thesis has received a positive grade.

- **the cumulative assessment principle** – regular work during the semester influences the final evaluation of the study course.
- **openness and clarity of requirements** –information about the content, requirements and evaluation criteria is available to each student at the beginning of the study process;
- **the principle of summative assessment of positive performance** – the study course is successfully completed only if all the requirements of the study course programme have been fulfilled and the learning outcomes have been achieved;
- **the principle of diversity of assessment methods** – different assessment methods are used;
- **differentiated evaluation based on the achievement of learning outcomes** – the programmes of study courses provide characteristics of the level of the achieved learning outcomes;
- **the principle of repeated assessment** – Article 4.2. and 4.3. of "The LLU Regulation of Studies" (2015) describes the procedure of repeated assessment.

The frequency of assessment of students' knowledge and skills depends on the volume and characteristics of the course, which are determined by the academic staff member responsible for the study course. The assessment system of each study course is explained in detail in the programme: the number of mid-term tests, the weight (in percentage or points) of the tests in the final assessment of the study course. The programmes of study courses also outline learning paths that are based on the assessment of knowledge, skills and competence at three levels with descriptions of these levels, as well as the methods of their implementation. Lecturers are entitled to introduce students with the learning outcomes and the assessment system of their achievement at the beginning of the study course.

The procedure of Article 4.2. of "The LLU Regulation of Studies" (2015) and the cumulative assessment principle require regular assessment of students' knowledge and skills during a semester using the testing methods described in the programme of the study course regardless of the type of the final assessment (an examination or a formal test).

Requirements for obtaining credit points included in the study course programmes show that the students fulfill most of the requirements during a semester. Types of assessment during a semester include: **tests, tests with calculations, colloquiums, quizzes, crosswords, home tasks, reports, essays, individual works, research activities, mind maps, seminars, computer-based assignments**. The most common types of assessment used by academic staff members of the study programme "Entrepreneurship and Business Management" included tests (39 study courses), individual works (36 study courses), tests with calculations (11 study courses) and quizzes (10 study courses).

The type of the assessment is determined by:

- the objectives and the results to be achieved for a specific study course;
- the content of the study course and the specific subject area;
- students' study opportunities;
- the study environment: available infrastructure, information resources and facilities, the material and technical provision;
- contribution of an academic staff member in conducting the study process.

In case of **formal test**s as the final assessment, a positive evaluation is obtained after a successful completion of a study course **without additional assessment** of the acquired knowledge at the end of the study course by summarizing the results during a semester.

If the type of the assessment is **a cumulative examination**, it results from grades in mid-term tests and the final assessment (an examination) during the period of individual studies and assessment or session. The requirements included in the course programmes show that the share of the final examination account for at least 40% in the total grade.

The examination as the final assessment is held face-to-face during the period of individual studies and assessment according to the approved schedule. There are varied examination methods depending on specific content of the study course and the course requirements which are described in the course programmes. Examinations can be arranged in written, oral form, in the form of tests as well as in a combined form. The procedure, the number of questions, their type and characteristics are determined by the responsible academic staff member.

During the study process students work on three individual works or course works. Common criteria for the evaluation of the course works are defined in the methodological instructions for writing and defending course works. The most important criteria are the following: novelty of the topic; evaluation of the achievement of the aim and tasks; skills to draw valid conclusions and to make constructive, reasoned recommendations; evaluation of the used literature and sources. Course works according to the approved criteria are evaluated by the supervisors of course works.

In addition, students work on three traineeship reports according to the content of the traineeship programme and requirements of the methodological instructions. The traineeship report is defended in the presence of the commission consisting of at least of three members; one of the members is a traineeship supervisor. A reference from the manager of a traineeship from the company is taken into account.

The criteria for the evaluation of the bachelor thesis are described in *Bachelor thesis review form* (available: http://www.esaf.llu.lv/lv/studiju-un-reglamentejosie-dokumenti). The criteria evaluate both the structure of the bachelor thesis (abstract, introduction, theoretical part, analytical part, conclusions and recommendations) and the bachelor thesis in general: technical performance, scientific quality, its visual and literary quality. The compliance of the bachelor paper with the criteria is evaluated by a reviewer on a four-level scale.

The main evaluation criteria for defending bachelor theses are: topicality; evaluation of the achievement of the aim and tasks; implementation of the research methods; the structure and an appropriate format; the references. The bachelor thesis is defended in the presence of the commission consisting of seven members out of which four are representatives of employers.

According to Article 5 of the "LLU Regulation of Studies" (2015) students may complain about the evaluation of the examination and the final thesis as well as the organisation and procedure of the study process, etc.

In the study program, the assessment of achievement of learning outcomes is consistent, fair, it is applicable to all students and implemented according to approved procedures. The teaching staff is familiar with and uses various assessment methods.

As the data of the student surveys show, 78% of the students on average during the reference period were satisfied with the fairness, certainty and requirements of the academic staff and the satisfaction of the students has increased during the last study years. 78% of the respondents on average evaluate the lecturers' attitude to students as "excellent" and "good", only 1% on the average evaluate the attitude as "unsatisfactory".

In recent years the focus has shifted from "teaching" to "learning" which was facilitated by the access to information technologies. Therefore studies in the study programme have become:

- *more personalized*: the information and the programmes of study courses are tailored to the

wishes, abilities, interests and needs of each student;

- *more interactive*: it is easy and pleasant to study by working, playing, creating, producing and interacting simultaneously with new digital formats and applications;
- *immediate*: with the help of information technology, it is possible to study everything exactly when it is needed, on demand and in a way that suits everyone;
- *tended to cooperation*: both in face-to-face class and in e-environment; online collaboration allows students to share their abilities with other students in the course.

2.4. If the study programme entails a traineeship, provide the analysis and assessment of the relation between the tasks of the traineeship included in the study programme and the learning outcomes of the study programme. Specify how the higher education institution/ college supports the students within the study programme regarding the fulfilment of the tasks set for students during the traineeship.

Professional traineeships are an important part of the study programme "Entrepreneurship and Business Management". The study programme includes three traineeship programmes with total number of 20 CP:

- Professional traineeship in the 3rd semester "Marketing" – 4 CP;
- Professional traineeship in the 4th semester "Accounting and Finances" – 6 CP;
- Professional traineeship in the 8th semester "Entrepreneurship and management" – 10 CP.

The aim of professional traineeships is to systematize, strengthen and extend theoretical and practical knowledge and general skills and to acquire specific job-related skills in the relevant field of professional traineeship. (i.e., marketing; accounting and finances of a company; entrepreneurship and business management).

The tasks of the traineeships:

- to ensure that students' theoretical knowledge is combined with practical work in order to evaluate the possibility to apply the knowledge acquired at the university in practice;
- to acquaint students with real-life situations in companies and to acquaint employers with potential employees;
- to enable entrepreneurs to engage students in day-to-day work activities and to assess their potential for work;
- to promote cooperation between companies and the university in order to better understand employers' expectations from young professionals.

During the professional traineeship "Marketing":

- students' theoretical and practical knowledge as well as skills in marketing are systematized, strengthened and deepened;
- students' ability to understand the regularities and principles of marketing and preconditions for the company's competitiveness is developed;
- students' ability to work independently to ensure marketing functions and to conduct meaningful marketing research to make marketing decisions is determined;
- students' communication, organizational, planning and teamwork skills are improved;
- students' cognitive skills to critically evaluate, analyze and synthesize both qualitative and quantitative marketing information in order to explore marketing problems are improved.

During the professional traineeship "Accounting and Finances":

- theoretical and practical knowledge as well as skills in accounting and finances are systematized, strengthened and deepened;
- students' abilities to apply the laws and regulations of the Republic of Latvia in the field of accounting, calculation of taxes and dues, as well as drawing up declarations and reports are developed;
- students' ability to independently use book-keeping accounts in recording of business transactions, to compile and fill in accounting documents and registers is determined;
- students' abilities to analyze the financial situation of the traineeship company, develop financial plans and determine sources of financing are developed;
- students' communication skills and team work skills are improved;
- students' independent work skill and skills to plan and organize their work effectively, to independently acquire new knowledge are improved.

During the professional traineeship "Entrepreneurship and Management":

- theoretical and practical knowledge as well as entrepreneurship skills are systematized, strengthened and deepened;
- students' ability to understand regularities and principles of current economic development and the relationship of the company's activities is developed;
- students' abilities to work independently in the market economy conditions, to conduct research on the basis of which decisions are made with the aim of increasing the efficiency of commercial activities are determined;
- skills to discover and analyze current problems and to make economically sound decisions for the development of these problems are improved;
- students' communication skills and team work skills are improved;
- Students' independent work skills, skills to plan and organize their work effectively, to independently acquire new knowledge are improved.

There are **two traineeship supervisors**: the university is represented by one supervisor who coordinates and controls the procedure of traineeship and is appointed by the respective institute in charge of the traineeship; a hosting organisation is represented by the second supervisor to guide and **advise a trainee according to the traineeship programme. During the traineeship there are also ongoing consultations with the supervisor appointed by the respective institute in order to ensure achievement of the tasks set by the traineeship**.

The student survey gave evidence that 65% of respondents on average were **satisfied** with the organization of traineeship in the reference period, but 22% on average were **partly satisfied**, and 13% were **not satisfied**. The analysis of the survey data shows that:

- part-time students have difficulty combining traineeship with their job if it is not possible to have the traineeship placement in their workplace;
- Students wish a wider range of organizations for traineeship.

The report describes the opportunities, provision and organization of traineeship placements offered to students in Part II, Chapter 5, sub-paragraph 3.

2.5. 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 evaluations of the

final theses.

At the end of their studies, students develop a bachelor thesis in the amount of 12 CP. The bachelor thesis is entitled to meet the following requirements:

- It should be an independent research on a topical problem of the national economy, an industry or a particular company;
- Students have to demonstrate their skill to conduct a comprehensive and effective literature search on a specific topic, be informed about the latest publications in different sources of information, analyze and evaluate articles published by other authors, and engage in a discussion on the topic of their thesis.
- It is compulsory to use the research methods in processing of data and information as well as data analysis in the analytical part of the research

The total amount of bachelor theses defended in the reference period is 186. The themes of the theses can be divided into the following five main groups:

- The analysis of a company's activities and development prospects (76 theses or 41% of the total number);
- Development of a business plan for start-up business (32 theses or 17%);
- The analysis of the business's competitiveness and ways to boost its competitiveness (12 theses or 6%);
- Personnel management, development, motivation (20 theses or 11%);
- The analysis of the business environment (6 theses or 3%).

It should be added that students in the last years of the reference period have researched such themes important for society, national economy and entrepreneurship as:

- Business data security analysis;
- The evaluation of e-commerce development possibilities;
- The evaluation of export opportunities;
- The analysis of the efficiency of investment projects;
- The study of resource management system;
- Quality management.

The topics of bachelor theses focus on issues from the micro-level perspective in relation to the content of the programme and the professional qualification to be acquired.

Fluctuations in the average grade for defending bachelor papers are insignificant (see Table 4.2.).

Table 4.2.

Evaluation of the final theses in the study programme "Entrepreneurship and Business Management"

Indicators	Academic year					
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Number of defended theses	40	37	28	26	17	38

Indicators	Academic year					
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Average grade of the theses, points	7.43	7.27	7.64	7.61	7.10	7.45
The number of the best theses	5	5	6	6	2	4
Share, %	13	14	21	23	12	11
Number of theses to be implemented into practice	5	5	3	5	2	9
Share, %	13	14	11	19	12	24

In the reference period the State Examination Commission gave the highest grade to 16% of the Bachelor's papers defended in the respective study year on average. These bachelor papers received the grades "outstanding" or "excellent". Several theses had been advised to put into practice. The theses analysed the development potential of existing businesses and the viability of implementation of new ideas.

2.6. Analysis and assessment of the outcomes of the surveys conducted among the students, graduates, and employers, and the use of these outcomes for the improvement of the content and quality of studies by providing the respective examples.

Student surveys are conducted in a number of ways in order to obtain a detailed and objective comparison of students' opinion on the diverse aspects of the quality of studies. Students express their opinion or evaluate the teaching staff twice a year by filling in a questionnaire in LLU Information System. The student survey is also organized once a year by the director of the study programme in order to find out students' opinion regarding lectures and classes, the sequence and validity of the assessment, availability of updated information about the study process, as well as teaching aids and technical provision of study process. Students have the opportunity to express their recommendations in the questionnaires regarding the study programme and improvement of the study process organization.

The analysis of the surveys shows that the majority of students are satisfied with the study process in the reference period:

- Study load by semester (72 % students on average are satisfied);
- The balance between practical classes and lectures (76% students on average are satisfied; 10% students on average are willing to have more practical classes);
- The schedule of classes and lectures (56% students on average are satisfied, 33% are partly satisfied);

- Work of administration (the dean's office, institutes) (83% students on average are satisfied).

A prevailing positive evaluation from students may be explained by:

- Regular surveys among students (once per academic year is compulsory);
- The analysis of the obtained data;
- Students' recommendations have been implemented to improve the study process.

The content of the study programme and the content of the study courses were improved based on the suggestions of the students; also improvements were introduced regarding the work and availability of ESAF Information Centre of Studies and Research as well as ESAF Dean's office.

The data obtained from the surveys of graduates show that the satisfaction of the graduates with their choice of the study programme was high: this was confirmed by 95% of the respondents on average. In the reference period the majority of graduates, i.e., 73% on average, would recommend their programme to their friends and acquaintances. Such an opinion is a direct and publicized indicator of the high evaluation of the study programme.

The results of the survey show that the majority of graduates of the study programme:

- have acquired the skills to independently obtain, select and analyze information (94% of respondents on average);
- have acquired skills to present the research findings, discuss and give arguments to their opinion in public (91% of respondents on average);
- have improved communication skills (90% of respondents on average) and organisational skills (90% of respondents on average), also, have acquired sufficient skills to apply knowledge to practical tasks (86 % on average).

The surveys in the reference period show that most graduates are satisfied with:

- the attitude of the academic staff towards students and cooperation (94% of respondents on average), and the availability of lecturers and communication possibilities with them (91% on average);
- the attitude of the faculty's technical staff towards students (95% of respondents on average);
- the schedule of lectures and classes (72 % on average).

Every year the survey is conducted among the employers, who hire students and graduates, as well as the employers, who provide traineeship placement. Employers rate students' skills in 7 positions. According to the survey results, employers gave the highest rating during the reference period to (see Fig. 4.2.):

- ability of students to acquire new knowledge and skills;
- students' communication skills with colleagues and customers;
- students' skills to plan and organize their work effectively;
- ability of students to work in a team, ability to delegate duties and perform the work.

The employers evaluated the students' skills obtained during the study process with 4.35 points, see in Fig.4.2. below:
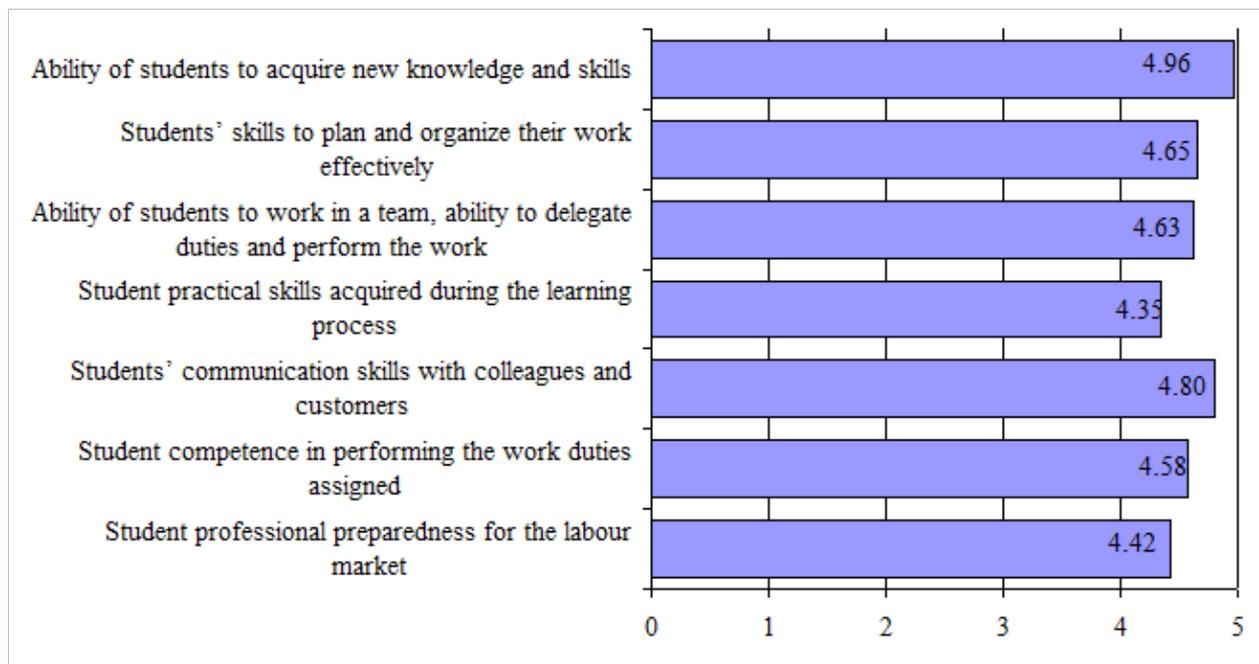
Fig. 4.2. **The average evaluation of the study programme "Entrepreneurship and Business Management" according to employers' opinion in the reference period** (5 – high level; 1 – low level)

Based on the recommendations by students, alumni and employers, the curricula of several courses have been enhanced, for example, Introduction to Studies, Tax Accounting, Financial Accounting, Entrepreneurship Legislation, Basics of Law, Business Economics, Business Planning, Analysis of Economic Activities etc.

Based on the recommendations by employers, group work was implemented in practicals of courses in order to develop skills to work in a team, as well as manage and plan the student's independent work.

Based on the recommendations by alumni and students:

- several activities were implemented (see "Incoming and outgoing mobility of students") in order to improve the programme's students' awareness of opportunities for studies and internships abroad;

- during the reporting period, several cooperation agreements have been concluded with employers, including the provision of work placements, thereby increasing the supply of work placements for the programme's students;

- to build up teaching personnel's practical knowledge and supplement the lectures and practicals of courses with specific case studies of small and medium enterprises, ESAF annually holds experience-sharing trips for its teaching personnel to national and foreign enterprises;

- representatives of employers and industry specialists are increasingly involved in the learning process, as well as the number of study trips for students has increased (see "Assessment of Teaching Methods");

- topics and supervisors for bachelor theses are approved in the 6th semester for full-time students and in the 8th semester for part-time students when the teaching personnel planning process for the next academic year is completed.

2.7. Provide the assessment of the options of the incoming and outgoing mobility of the students, the dynamics of the number of the used opportunities, and the recognition of the study courses acquired during the mobility.

As regards the students' mobility, eight students have participated in the *ERASMUS+* international mobility opportunities for higher education students in the reference period. Five full-time and three part-time students studied in three LLU partnering universities:

- Slovak University of Agriculture in Nitra;
- Rosenheim Technical University of Applied Sciences in Germany;
- University of Economics, Varna, in Bulgaria (see Table 4.3.).

Table 4.3.

Outgoing students' mobility of the study programme "Entrepreneurship and Business Management"

Indicators	Academic year					
	2013/14	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
Number of students	2	-	-	3	-	3
Partnering university	Slovak University of Agriculture in Nitra	-	-	Rosenheim Technical University of Applied Sciences, Germany	-	University of Economics, Varna, in Bulgaria)

The small number of mobility activities in the study programme can be explained by the distribution of students between the modes of studies: in the reference period 23% of students on average studied full-time and 77% studied part-time.

The analysis of the survey data show that, on average, 38% of respondents were not interested in mobility opportunities which explains the small number of students who have used this opportunity. The proportion of these respondents increased during the reference period. The analysis of the respondents' demographic data reveals that 77% of the respondents on average were employed during the period from 2014/15 to 2018/19, therefore the students were not ready to terminate contractual relationship with an employer to study one semester in partnering universities abroad. Employers are not always generous in granting unpaid leave of absence and keeping the vacancy to give an opportunity to study at a foreign university.

The survey shows that the students of the study programme have become more aware of the possibilities of international mobility; their opinion was influenced by the following processes and activities:

- Starting from the academic year of 2015/16 not only the number of credit points of the study course "*Introduction into Studies*" was increased by 1 CP, but also the topic on student mobility opportunities was included in the content of the course programme. In the framework of the study course "*Introduction into Studies*", first-year full-time and part-time

students met with the faculty's international affairs coordinator who informed them about studies and traineeship opportunities in partnering universities abroad and with ESAF students who shared their ERASMUS+ mobility experiences;

- there is a comprehensive information on ERASMUS+ international mobility opportunities for higher education students available in the LLU website, international affairs coordinators, LLU *ERASMUS+* mobility coordinator, as well as the most interesting stories of students experience during the ERASMUS+ mobility in partnering universities;
- an international affairs coordinator and the director of the study programme provide individual consultations for mobility opportunities;
- LLU International Cooperation Centre arranges *ERASMUS+* experience exchange events;
- The informative announcement (twice a year) is available prior to the application submissions in the website of the faculty and the university, on the information board, on the TV screen in the hall of the faculty.

The recognition of the results acquired in the partnering universities abroad during *ERASMUS+* mobility is performed **by the director of the study programme** according to the Rector's decision "On Academic Recognition Procedure at LLU". Those study courses are recognized which are approved in the Study Agreement, its amendment, and which have received a positive evaluation.

Upon returning from a foreign higher education institution, a student submits the following documents to the director of the study programme:

- The original of the Transcript of Records which contains the study courses and credit points acquired at the university abroad.
- The description of study courses upon the request of the director of the study programme to compare the content and the volume of credit points.

If a student has not fulfilled the volume of studies determined in the Study Agreement, he/she shall be considered as having an academic debt. In this case an examination shall be taken at LLU. An approval should be received from the director of the study programme and an academic staff member of the respective study course. The student must provide an explanation of why the study plan has not been completed.

III - DESCRIPTION OF THE STUDY PROGRAMME (3. Resources and Provision of the Study Programme)

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. Whilst carrying out the assessment, it is possible to refer to the information provided for in the criteria set forth in Part II, Chapter 3, sub-paragraphs 3.1 to 3.3.

Available study infrastructure, information sources and facilities, material and technical provision and funding are sufficient and appropriate for the implementation of the study programme and

ensures achievement of the learning outcomes. The implementation of the study programme is based on information sources and facilities, material and technical provision of the university, ESAF and other faculties (see Part II, Chapter 3, sub-paragraphs 3.2. to 3.3.)

The results of the surveys give evidence that the majority of students were satisfied with:

- the operation of ESAF Information Centre of Studies and Research (79% of respondents on average in the reference period);
- available text books, course books, methodological literature (85% respondents on average);
- the premises of the faculty and the layout and relevance of the classrooms for the study (6% of respondents on average evaluated the premises as "excellent"; 45% on average evaluated as "good"; 40% on average evaluated as "satisfactory". Only 6 % of respondents were not satisfied with the premises and provision).

Furthermore, the results of the surveys show that 95% of respondents on average used LLU IS to obtain information about the study results and the process.

The data of graduate surveys reveal that graduates of the programme highly evaluated the resources and material provision of the programme:

- 44% of respondents on average **fully agreed** and 49 % on average **rather agreed** with the statement *"The text books and subject-specific literature necessary for studies were available in the ESAF Information Centre of Studies and Research and LLU library"* in the reference period:
- 29% of respondents on average **fully agreed** and 61% on average **rather agreed** with the statement *"Material and technical provision of the study process was good"*;
- 58% of respondents on average **fully agreed** and 35% on average **rather agreed** with the statement *"LLU information system was easy to understand and use"*;
- 37% of respondents on average **fully agreed** and 45% on average **rather agreed** and 12% on average **rather agreed** with the statement *"Information about the study process at the faculty was easily accessible (information board, website)* in the reference period.

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

III - DESCRIPTION OF THE STUDY PROGRAMME (4. Teaching Staff)

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

The academic staff members play an important part in providing high quality content to students in

the study process and promoting acquisition of knowledge, skills and competences.

Table 4.4.

Academic Staff of the study programme "Entrepreneurship and Business Management"

Indicators	Academic year					
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Total number of academic staff	**49**	**49**	**47**	**42**	**43**	**46**
including:						
– professors	3	3	3	2	3	3
– associate professors	5	5	6	5	4	6
– visiting associate professors	0	1	1	1	2	1
– associate professors Emeritus	0	0	1	0	0	0
– docents	11	8	7	8	10	10
– visiting docents	2	5	3	3	1	1
– lecturers	13	10	8	7	8	8
– visiting lecturers	14	16	18	16	15	17
– visiting assistants	1	1	0	0	0	0
Share of elected academic staff, %	**65**	**53**	**51**	**52**	**58**	**59**
Share of visiting academic staff, %	**35**	**47**	**49**	**48**	**42**	**41**
Number of implemented study courses excluding elective courses and traineeship	45	45	44	43	49	51

Number of implemented elective courses	5	5	7	6	9	5
Number of courses involving two and more members of academic staff	6	8	8	5	4	7

Overall, academic staff members from **6** LLU faculties (**10** institutes and departments) are involved in the implementation of the programme:

- **Faculty of Economics and Social Development**,
- **Faculty of Information Technology**,
- **Faculty of Engineering**,
- **Forest Faculty**,
- **Faculty of Environment and Civil Engineering**,
- **Faculty of Food Technology**,

as well as academic staff members from **the Language Centre**. The above mentioned structural units ensure the teaching of respective study courses, methodological work, development, updating and correcting of study course programmes, as well as the study quality.

The study process was implemented by 46 members of academic staff on average which accounted for 8.1. of full work-load in the reference period. No significant changes occurred in the quantitative amount of the teaching staff and in persons. Changes in the number of teaching staff during the reference period were influenced:

- Changes in the plan of the study programme: From 2015/2016 the following study courses were removed from the programme "*History of Economic Thought*" (2 CP) and "*Customs Issues*" (2 CP). The contents of the study course "*Economic Analysis*" was significantly improved, its volume was increased from 3 to 4 CP, in addition, the title was changed to "*Analysis of Economic Activities*". A new study course "*Business Planning*" was introduced (3CP). The changes were introduced to facilitate the relevance of students' knowledge and skills to the demands of the labour market (approved on February 20, 2013, by the ESAF Board meeting, the protocol No.06-24.02/2.) The study course *"Basis of Computer Technologies"* (2 CP) and "*Business Information Management*" (2 CP) were joined together to reduce fragmentation of courses (approved on February 20, 2013, by the ESAF Board meeting, the protocol No.06-24.02/13.). The study course *"Economic Management Studies"* was not implemented in 2016/2017 due to changes in the semester of intended implementation.
- A new specialization direction "Rural Tourism Management" was launched starting from the academic year of 2017/2018, consequently 5 new study courses were introduced in 2017/2018, and two new study courses were introduced in 2018/2019. Thus it was necessary to involve new members of academic staff.
- The number of implemented elective study courses is influenced by the selection of full-time students.

Industry professional were involved in the implementation of three study courses (*Tax Accounting*, *Financial Accounting* and *Logistics*).

The composition and number of the teaching staff is adequate and sufficient to ensure the implementation of the study programme in high quality.

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

The procedure and regularity of the professional development as well as research activities of the academic staff are determined by:

- *Law on Institutions of Higher Education of the Republic of Latvia* (1995);
- Regulation No. 391 of the Cabinet of Ministers (04.09.2001) "*Procedure for assessment of scientific and pedagogical qualification of professor and associate professor*", which determines the procedure by which the Board of Professors of the scientific field assesses scientific and pedagogical qualifications of a candidate for the position of a professor or associate professor, and provides that the scientific and pedagogical qualifications obtained during the last six years shall be taken into account;
- *LLU "Regulation on Academic Positions"*, which defines the requirements for candidates for academic positions (professor, associate professor, docent, leading researcher, lecturer, researcher and assistant);
- Results of the student surveys regarding the quality of teaching staff, etc.

As regards the positions of the teaching staff members in the reference period, 56.3 % of them on average were in elected positions at LLU (or 26 members on average) and 43.7% were visiting teaching staff members working on the basis of the agreement for the period of one year. "*LLU Regulation on Academic Positions*"(The Decision of the Senate No8-36 as of December 11, 2013) states that "*election to an appropriate academic position verifies the relevance of a person's academic and professional qualifications to both study and research work.*"

The high qualification of the academic staff is also evidenced by the scientific qualification, as all the teaching staff members involved in the study process have a doctoral degree or master's degree. (see Table 4.5.).

Table 4.5.

Scientific qualification of the teaching staff members involved in the study programme "Entrepreneurship and Business Management"

Indicators	Academic year					
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
	Doctors					
Number	18	20	19	18	19	21

Share, %	37	41	40	43	44	46
Masters						
Number	31	29	28	24	24	25
Share, %	63	59	60	57	56	54

The share of the staff members with a doctoral degree involved in the programme has increased from 37 % in 2013/14 to 46 % in 2018/19. The reasons for the changes were the following:

- in the reference period four lecturers involved in the implementation of the study programme defended their doctoral theses and became doctors of economics;
- to implement the specialisation direction "Rural Tourism Management", new members of teaching staff with the doctoral degree were involved in the study process;
- three lecturers with a doctoral degree involved in the implementation of the study programme decided to terminate their agreement with LLU, but the new doctors and staff members compensated for this change.

LLU and ESAF provide the supporting working environment that ensures the staff to carry out their work effectively. The environment:

1. provides opportunities and encourages teaching staff members to **develop their professional qualification**:

- LLU Studies Centre arrange annual LLU Academic Conferences and the competition of text books, course books and teaching aids;
- There is LLU academic staff motivation system;
- LLU Language Centre offers English language improvement courses;
- LLU Communication and Marketing Centre arranges seminars for professional development on regular basis;
- LLU International Cooperation Centre provides *ERASMUS+* Teaching Mobility opportunities;
- ESAF annually arranges trips of exchange of experience to companies in Latvia and abroad.

2. **promotes innovation in study methods and the use of new technologies**:

- At least once in six years academic staff members attend professional development programme for university teaching staff "Innovations in Higher Education Didactics" (160 hours);
- Academic staff members receive consultations from LLU e-learning environment administrator about Moodle software options, opportunities, topicalities and latest improvements;

3. **promotes research activities** that improve professional development.

The teaching staff involved in the implementation of the study programme regularly improve their qualification outside LLU:

- attending professional training events, seminars and courses organized by different organizations;
- participating in *ERASMUS+* mobility programme in LLU partnering universities;
- participating in the boards and commissions of various institutions and organisations.

The analysis of the qualification of the academic staff in the reference period shows that the teaching staff involved in the study process of the programme actively participated in various activities of professional development, research activities and preparation of teaching aids and additional materials. The experience, knowledge and skills acquired as a result of the activities were used to improve the quality of the study process in order to provide students with a wide range of knowledge and understanding of commercial activities and business management to achieve the planned learning outcomes.

The survey data reveal that in the reference period 20% of students on average evaluated the knowledge of the teaching staff members as **"excellent",** 56% on average as **"good"** and 14% on average as **"satisfactory"**.

The graduates of the programme highly evaluated the qualification of academic staff members. 33% of respondents on average **fully agreed** and 59 % on average **rather agreed** with the statement *"On the whole, lecturers are highly qualified, erudite and knowledgeable in their field"*. During the reference period, the evaluation of graduates has improved, which means that **participation in various boards, organizations, professional development events, research activities have had a positive influence on the qualification of the teaching staff and the quality of studies.**

4.3. Information on the number of the scientific publications of the academic staff members, involved in the implementation of the 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 may be additionally specified (if applicable).

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).

4.5. Provide examples of the involvement of the academic staff in the scientific research and/or artistic creation activities both at national and at international level (in the fields related to the content of the study programme), as well as the use of the obtained information in the study process.

The research work of the academic staff is carried out through scientific publications and presentations of their results at conferences and scientific seminars, as well as participation in scientific projects.

During the reference period **17** members of the academic staff of the programme "Entrepreneurship un Business Management" participated in **26** research projects at national and international level and two contractual research projects. The results of many implemented projects were integrated in the content of the study courses taught by the lecturers involved in the projects. For example, in 2013, one docent participated in two projects:

- the project of the Ministry of Agriculture *"Analysis of labour force taxes in agriculture"*,
- the project of "Latvian State Forest", JSC, project *"Economically efficient, sustainable and productive use of land for agricultural and forestry production".*

Consequently, the project results were integrated in the content of the study course "*Economic Management Studies*".

In 2015 a docent participated in the project of the Ministry of Agriculture "*Rezekne District Community Partnership Rural Development Program 2007-2013 Measure "Evaluation of implementation of local development strategy and recommendations for further actions*", the project's results were included in the content of the study course "*Strategic Analysis and Planning*".

In the period of 2013–2016 two docents participated in the international project "*Youth in transition countries – innovative potential, new context, new challenges and new problems*"; consequently the results of the project were integrated in the study course "*Sociology*". Then from 2015 to 2017 a docent participated in *ERASMUS+* project "*Looking at Learning*" and integrated the project results in the study course "*Sociology*".

In the period of 2014–2017 two associate professors, two docents and a visiting lecturer took part in the national research programme "*Economic Transformation, Smart Growth, Governance and the Legal Framework for Sustainable Development of State and Society - New Approaches to Building a Sustainable Knowledge Society*"; consequently, the study courses "*Innovation Management*", "*Globalization of Business*" and "*Marketing*" were enriched with topical information.

In the period of 2016–2018 a professor took part in the project of Latvian State Forest, JSC, "*Assessment of Land Use Optimization Opportunities in Latvia in the Context of Climate Policy*", and the results of the project were integrated in the content of the study course "*Economic Management Studies*".

Three associate professors were involved in the implementation of the *ERASMUS+* project "*Education in rural entrepreneurship through producing and valorising of medicinal and aromatic plants*" (2016–2018) which resulted in the training material "*Entrepreneurship in Rural Areas through the Production and Exploitation of Medicinal and Aromatic Plants*" Training Course Curriculum "*Entrepreneurship in Rural Areas through the Production and Exploitation of Medicinal and Aromatic Plants*", which was used in the study courses "*Business Planning*", "*Risk Management*", "*Economic Management Studies*", "*Business Economics*".

In 2017 an associate professor took part in the project by the Rural Support Service "*Socio-economic evaluation of development scenarios of Latvian bioeconomy sectors*", as a result the project findings were integrated in the course "*Business Information Management*".

In the period of 2016–2019 an associate professor and a docent participated in the INTERREG Central Baltic programme project "*Development of metacluster to attract Japanese tourism market*" to use the obtained experience and information in the study courses "*Globalization of Business*", "*Marketing*", "*Advertising Management*" and others.

In the period of 2017–2018 four associate professors participated in OECD research "*Intellectual services related to the preparation of the Latvian Agricultural Innovation System Master Report*" which provided additional information for the courses "*Financial Management*", "*Business*

Economics", "*Business Information Management*", "*Globalization of Business*" and others.

In 2017 a docent in cooperation with Gulbene local government worked out a questionnaire to find out the youth's opinion to improve and develop youth planning documents in Gulbene municipality; consequently the results of this contractual research is used in the course "*Sociology*".

In the reference period the academic staff members of the study programme "Entrepreneurship and Business Management" published 238 publications, out of which 92 were integrated in the content of several study courses (see Table 4.6.).

Table 4.6.

The publications of the academic staff members involved in the implementation of involved in the study programme "Entrepreneurship and Business Management" in the reference period

Indicators	Academic year					
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Total number of publications	45	38	38	38	38	41
Number of publications the results of which are used in the study process	15	13	20	18	10	16
	Study courses which integrated the research results					
International Economic Relations	x	x	x	x	x	x
Economic Management Studies	x	x	x	x	x	x
Marketing	x	x	x	x	x	x
Globalization of Business	x	x	x		x	x
Business Information Management	x	x	x	x	x	x
Tax Accounting	x	x	x	x		x
Sociology		x	x	x	x	
Analysis of Economic Activities	x	x	x	x		

Indicators	Academic year					
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Project Management	x				x	x
Single-entry Accounting	x	x				
Advertising Management			x	x		
Financial Management				x		
Quality Management					x	x
Business Economics			x			x
Business English			x		x	
Logistics			x			
Labour and Civil Protection			x			
Rural Tourism Business					x	x
Tourism and Recreation					x	x
Tourism Legal Order						x
Customer Relationship Management					x	

4.6. 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 courses/ modules. Specify also the proportion of the number of the students and the teaching staff within the study programme (at the moment of the submission of the Self-Assessment Report).

In the reference period more than two academic staff members were involved in the implementation of one study course (See Table 4.4.). For example, *Labour and Civil Protection*, *Ecology and Environmental Protection*, *Economic Management Studies*, lectures were delivered by

professors, associate professors or docents, but lecturers or visiting lecturers worked in practical classes. Also, for example, study courses *Financial Management, Analysis of Economic Activities, Catering Organisation and Service, Business Economics, Business Information Management* were implemented by two academic staff members simultaneously dividing the topics of the programme according to their qualification, research interests and professional activities.

In order to ensure the interconnection of the study courses, the study course programme development process regulated by LLU was observed (the decision of the Vice-rector for Studies "*On the procedure of study course / traineeship programme development and information registration and updating procedure in LLU IS course register*"), which consists of three step-by-step stages:

- the approval of an elaborated study course / traineeship programme at the meeting of the academic staff of the responsible department / centre / institute (the head of the responsible department / centre / director of the institute is responsible for the implementation of this stage);
- the approval of the elaborated study course / traineeship programme at the meeting of the Methodological Commission, which is responsible for the study programme containing the study course / traineeship programme (the Methodological Commission is responsible);
- the approval of the elaborated study course / traineeship programme at the meeting of the faculty's board representing a respective branch/sub-branch of science, (the board of the faculty is responsible).

The director of the study programme as a member of the Methodological Commission evaluates a study course / traineeship programme approved by institutes/ departments and submitted to the Methodological Commission in detail and checks if the topics of the courses do not overlap.

The data of the sub-chapter 4.5. give evidence that the academic staff members involved in the implementation of the study programme cooperated in the framework of the research projects; also several lecturers prepared joint publications.

As there were no significant changes in the number of students and academic staff during the reference period, the ratio of lecturers and students was relatively stable, i.e., 21 students per academic staff member.

Annexes

III. Description of the Study Programme - 1. Indicators Describing the Study Programme		
Compliance of the joint study programme with the provisions of the Law on Institutions of Higher Education (table)		
Statistics on the students over the reporting period	Annex_13.pdf	13_pielikums_LV.pdf
III. Description of the Study Programme - 2. The Content of Studies and Implementation Thereof		
Compliance of the study programme with the State Education Standard	Annex_14.pdf	14_pielikums_LV.pdf
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard (if applicable)	Annex_15.pdf	15_pielikums_LV.pdf
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)		
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	Annex_17.pdf	17_pielikums_LV.pdf
Curriculum of the study programme (for each type and form of the implementation of the study programme)	Annex_18.pdf	18_pielikums_LV.pdf
Descriptions of the study courses/ modules	Description_on_the_study_courses.rar	Studiju_kursu_apraksti.rar
Description of the Study Direction - Other mandatory attachments		
Sample of the diploma to be issued for the acquisition of the study programme.	sample of diploma.rar	Diploma paraugs.rar
Description of the Study Programme - Other mandatory attachments		
Document confirming that the higher education institution/ college will provide the students with the options to continue the acquisition of education in another study programme or at another higher education institution/ college (a contract with another accredited higher education institution/ college), in case the implementation of the study programme is discontinued	Agreement_between_LLU_RTU and LLU_LiepU.rar	Vienošanās_LLU_RTU_un LLU_Liepājas Universitāte.rar
Document confirming that the higher education institution/ college guarantees to the students a compensation for losses if the study programme is not accredited or the licence of the study programme is revoked due to the actions of the higher education institution/ college (actions or failure to act) and the student does not wish to continue the studies in another study programme	LLU confirmation_Entrepreneurship_Management.docx	LLU_apliecinajumi_ESAF_programmai_KUV.edoc
Confirmation of the higher education institution/ college that the teaching staff members to be involved in the implementation of the study programme have at least B2-level knowledge of a related foreign language according to European language levels (see the levels under www.europass.lv), if the study programme or any part thereof is to be implemented in a foreign language.		
If the study programmes in the study direction subject to the assessment are doctoral study programmes, a confirmation that at least five teaching staff members with doctoral degree are among the academic staff of a doctoral study programme, at least three of which are experts approved by the Latvian Science Council in the respective field or sub-field of science, in which the study programme has intended to award a scientific degree.		
If academic study programmes are implemented within the study direction, a document confirming that the academic staff of the academic study programme complies with the provisions set out in Section 55, Paragraph one, Clause three of the Law on Institutions of Higher Education		
Sample (or samples) of the study agreement	Studiju_ligums_paraugs_EN.pdf	Studiju_ligums_paraugs_LV.pdf
If academic study programmes for less than 250 full-time students are implemented within the study direction, the opinion of the Council for Higher Education shall be attached in compliance with Section 55, Paragraph two of the Law on Institutions of Higher Education.		

Business Studies

Title of the higher education institution	Management, Administration and Management of Real Property
ProcedureStudyProgram.Name	Business Studies
Education classification code	41341
Type of the study programme	First level professional higher education study programme
Name of the study programme director	Ināra
Surname of the study programme director	Jurgena
E-mail of the study programme director	inara.jurgena@llu.lv
Title of the study programme director	Dr.oec
Phone of the study programme director	63025170
Goal of the study programme	To educate qualified business specialists who perform organisation and management of business activities in order to ensure efficient operation of a company and its structural units, who, by having acquired high-quality higher professional education, are able to plan and ensure the operation of the company in accordance with the requirements of legislation and market development trends.
Tasks of the study programme	1. To prepare qualified and competitive business professionals who use the knowledge of business organization and management in practice, observe the laws and regulations of the Republic of Latvia and ensure business operations of a company. 2. To provide students with the qualification, theoretical and practical knowledge relevant to the requirements of the labour market and profession standard for provision of business activities. 3. To promote and develop the ability to independently acquire knowledge and skills, and to apply them in practice.

| Results of the study programme | Knowledge:
(Z1) Students are able to demonstrate and use comprehensive knowledge of processes in society and are familiar with the economic environment, they observe employment legislation and safety, ecological requirements, they are able to see the regularities of processes.
(Z2) Students know and understand business processes in the context of a company development and regional development, bioeconomy and circular economy.
(Z3) Students know and understand the basic principles of accounting and planning, the application of taxation and financial system.
Skills:
(P1) Students have skills to focus on business operations of a company, analyze and evaluate the company's performance, its results, plan, organize and control processes in manufacturing and service companies, as well as work in a team, process data for solving economic and management tasks based on the analytical approach.
(P2) Students have skills of setting up a company, cooperate with others, participate in the planning and logistics of the necessary resources, develop business plans, participate in the project management process.
(P3) Students are able to represent a company in deals with other companies, to use information technologies to carry out their activities, they are able to organise their work rationally, develop their professional qualification .
(P4) Students able to organise effective communication, participate in business deals on behalf of the company, find out customers' needs, respect professional ethics, take responsibility for the results of their professional activities.
Competences:
(K1) Students are able to identify priorities, delegate and control tasks, arrange high-quality customer-oriented services, manage and coordinate personnel, identify and analyse risks of economic and financial activities.
(K2) Students are able to focus on and observe the legislation requirements of business activities, employment, financial sphere, analyse and evaluate indicators of a company's economic performance, make recommendations to improve them. |
| Final examination upon the completion of the study programme | The qualification thesis (8 CP / 12 ECTS) |

Study programme forms

Full time studies - 2 years - latvian

Study type and form	Full time studies
Duration in full years	2
Duration in month	0
Language	latvian
Amount (CP)	80

Admission requirements (in English)	General secondary education or vocational secondary education
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	
Qualification to be obtained (in english)	Business Specialist

Places of implementation

Place name	City	Address
Latvia University of Life Sciences and Technologies	JELGAVA	LIELĀ IELA 2, JELGAVA, LV-3001

Part time studies - 2 years, 6 months - latvian

Study type and form	Part time studies
Duration in full years	2
Duration in month	6
Language	latvian
Amount (CP)	80
Admission requirements (in English)	General secondary education or vocational secondary education
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	
Qualification to be obtained (in english)	Business Specialist

Places of implementation

Place name	City	Address
Latvia University of Life Sciences and Technologies	JELGAVA	LIELĀ IELA 2, JELGAVA, LV-3001

III - DESCRIPTION OF THE STUDY PROGRAMME (1. Indicators Describing the Study Programme)

1.1. Description and analysis of changes in study programme parameters that have taken place since the issue of the previous accreditation certificate of study direction or the license of study programme if study programme is not included in the accreditation page of the study direction

In the period since the last accreditation certificate for the field of study has been issued, the following changes have been made in two parameters of the programme Business Studies:

1. The programme is not delivered in the **form of extramural studies** because students did not prefer this form of studies.
2. The professional qualification to be awarded – a **business specialist** – was made precise in accordance with the *National Professional Standard for Business Specialists*.

1.2. Analysis and assessment of the 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 in the different study forms, types, and languages.

Historically, the study programme was established in 2001 and initially implemented in the Laidze branch (Talsi district), but later on in the Sigulda branch of the university. The studies were conducted on a part-time basis, on Fridays and Saturdays. In this way a number of students from the respective districts were involved exceeding the present number of students 3 to 5 times. The expressed interest among students in the study programme was related to the necessity to obtain the higher education with the purpose to work in various public administration institutions. After 2008 there was a drop in the number of students in the branches due to the fact that the majority of those interested in the higher education had obtained it. In 2014 the Senate of LLU adopted a decision to close down the branch in Sigulda, therefore the Vidzeme office was established instead.

Since 2013 the amount of students have changed significantly in the study programme "Business Studies", i.e., the number of students has decreased 4 times (See Annex No.13). Changes in the number of students were related to the general demographic situation in the country, as well as other trends in the country, for example, if young people chose to start working, they could study only in their spare time, therefore they selected part-time studies. Consequently, full-time mode of the programme "Business Studies" was available only two years (2012 - 2014).

The study programme "Business Studies" is implemented in the official state language. The part-time studies are held in Jelgava on Fridays (after 13.00) and on Saturdays. Those students who decided to leave the university in the reference period indicated that the main reasons for discontinuing studies were the difficulty to combine learning with work and insufficient time for completing assignments. Another reason for the reduction in the number of students was that this is a fee paying study programme, and young people were more willing to choose study programmes that were free of charge, i.e., programmes with state-financed places.

Table 3.1.

Dynamics of the number of students in the study programme "Business Studies" by year of studies and academic years in the period 2013-2018

Academic year	Full-time		Total of full-time	Part-time			Academic leave	Total of part-time	Total
	1st year	2nd year		1st year	2nd year	3rd year			
2013/2014	-	4	4	25	23	13	1	62	66
2014/2015	-	-	-	30	20	20	-	70	70
2015/2016	-	-	-	21	24	21	3	69	69
2016/2017	-	-	-	6	22	17	5	50	50
2017/2018	-	-	-	-	9	17	9	35	35
2018/2019	-	-	-	9	-	6	1	16	16

Changes in the number of enrolled students were most closely related to the general demographic situation of the country, which was characterized by a large decrease in the population in the age group of 20-24 years (in 2016 a decrease was by 9%) which was mostly represented group in the age structure of students. As the results of the OECD study show, Latvia has one of the highest rates of part-time students in OECD countries, the data refer also to the study programme "Business Studies" (49%).

Since the number of students had decreased in Sigulda branch, it was closed down in 2014, followed by the establishment of the Vidzeme office (the protocol No.2.1.-2-40/3 of LLU ESAF Board meeting with consequent amendments in the ESAF Regulation, 2017). Later the Vidzeme office was closed down as well on the basis of the changes in the faculty's structure.

Likewise, the Laidze branch of the Faculty of Economics and Social Development was closed down on July 1, 2017, following the decision of LLU Senate No.9-67 as of February 08, 2017. The 1st level professional study programme "Business Studies" had been implemented in the Laidze branch. The above mentioned activities explain the drop of the number of students in the academic year of 2017/18 from 50 to 35.

The analysis of the number of students who have discontinued studies (exmatriculated students) allows to conclude that during the academic year of 2014/2015, which was the beginning of the reference period, the majority of dropout students (66%) were exmatriculated during the 1st year of their studies. However, as regards 2016/2017 academic year, 66% of exmatriculated students discontinued their studies during the 2nd year.

The main reasons for discontinuing the studies were:

- failure to fulfil the requirements of the study agreement, not being able to meet financial obligations (most common reasons in the period of 2014-2016);
- not starting studies (most common in 2014-2017);

- failure to fulfil the requirements of the study agreement, failure to comply with the requirements of the study programme (insignificant share);
- did not return from an academic leave (insignificant share).

The reasons for student dropouts were different but most often they were related to the financial side because the study programme "Business Studies" did not offer state-financed places (Annex 13).

Changes in the number of graduates were related to changes in the total number of students. During the reference period, 82 graduates, including 4 full-time graduates, completed the study programme.

Currently, the study programme "Business Studies" is implemented only in the premises of Jelgava. The studies are implemented in the official state language for a tuition fee.

The statistic changes in the academic year of 2019/2020 may be considered as the stabilization of the number of students in the study programme.

Students have an access to study loans to cover the tuition fee both for full-time and part-time mode.

1.3. Analysis and assessment of the interrelation between the name of the study programme, the degree or professional qualification to be acquired or the degree and professional qualification to be acquired, the aims, objectives, learning outcomes, and the admission requirements.

The study programme "Business Studies" was established according to the Regulation No. 141 "Regulations regarding the State Standard for First Level Professional Higher Education" of the Cabinet of Ministers as of March 20, 2001.

The aim of the study programme is in compliance with the requirements of the national education standard. The content of the study programme is in compliance with the state standard of professional higher education. The parts of the study programme – study courses (general, field and elective), professional traineeship outside an education institution and a qualification paper are in compliance with the Regulation No. 141 "Regulations regarding the State Standard for First Level Professional Higher Education" of the Cabinet of Ministers as of March 20, 2001 (Annex18).

The volume and structural division are in compliance with the requirements of the national education standard. See Annex 14 for the compliance of the volume and structure of the study programme with the national education standard.

The title in the Latvian language "*Komerczinības*" (In English: *Business Studies*) of the study programme contains one word, and it clearly reflects the nature of the field of study. There is a close and unambiguous link between the title and the field of the study programme. The admission requirements provide clear information about the qualifications, knowledge, skills and competences to be acquired in the study programme. The admission requirements clearly define what documents and what education level are required to study in the first level programme. More detailed information on admission requirements are available in Part II Chapter 1 sub-paragraph 5 on the admission requirements.

The title of the programme "Business Studies" reflect the qualification "a business specialist",

which focus on knowledge and skills necessary for the work under the guidance of a manager of a company.

III - DESCRIPTION OF THE STUDY PROGRAMME (2. The Content of Studies and Implementation Thereof)

2.1. Assessment of the relevance of the content of the study course/ module and the compliance with the needs of the relevant industry and labour market and with the trends in science. Provide information on how and whether the content of the study course/ module is updated in line with the development trends of the relevant industry, labour market, and science. In 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.

The study courses included in the study programme reflect professional standards, including descriptions of skills and competences. The research findings conducted by OECD (OECD (2019), Education at a Glance data basis) claim that professional education programmes which in Latvia include at least 25% of practical training courses provide many benefits in the labour market.

In order to update and improve study courses, surveys of employers is organized every year to find out the opinion of employers. **Evaluation of study courses by employers**: 67% of the surveyed employers believed that all the study courses included in the study programme were necessary and up-to-date, 29% of the surveyed employers thought that study courses were of medium importance, 19% of the surveyed employers believed that some additional study courses should be included, but 13% considered that no changes were necessary.

The last significant changes in the curriculum of the study programme were made in 2017 when 11 study courses were improved: some courses were modified, in other cases, new ones were included instead of the previous ones.

Student surveys are conducted each year to find out students' opinion. During the reference period 43% of students on average considered the content of the study programme to be fully relevant and 35% considered it to be partially in line with the requirements of the labour market.

The curriculums and the programmes of study courses are regularly analysed in the meetings of the ESAF methodological commission for undergraduate studies. The last improvements were made in all study courses in 2018/2019, when knowledge, skills, competences and assessment methods were improved and updated.

The teaching staff members involved in the study programme participate in the scientific conferences of various levels and annual LLU Academic Conferences which analyse issues of the academic study process. The teaching staff members deliver reports and exchange the experience on the latest scientific trends which are then incorporated into the respective courses taught by the teaching staff.

The improvement of the content of the study courses is based on:

- participation of academic staff in the projects of various levels;

- participation in different staff exchange programmes, for example, ERASMUS;
- active participation of teaching staff in various societies, professional organizations, advisory boards and boards of experts;
- scientific activities of teaching staff, incorporation of the latest research findings into study courses;
- information on research findings from scientific conferences;
- development of professional qualification in seminars, in training modules of university didactics.

2.2. Assessment of the interrelation between the information included in the study courses/ modules, the intended learning outcomes, the set aims and other indicators, the relation between the aims of the study course/ module and the aims and intended outcomes of the study programme. In 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.

The aims and learning outcomes of study courses are related to the aim, content and learning outcomes of the study programme.

The development of the study courses in the framework of the study programme was based on the requirements of the professional standard. In addition, the recommendations of experts regarding the content of the study programme and its study courses were taken into account. The information included in the study courses were closely linked to the achievement of learning outcomes.

The content of study courses in the study programme facilitates and ensures education of qualified specialists in the field of entrepreneurship, who are able to organize business activities under the guidance of a company manager, and who are familiar with business activities of a company. The content of individual study courses ensures that the intended results of the programme are achieved in good quality. The traineeship is an integral part of the study programme in the amount of 16 CP, which provides students with an opportunity to apply the acquired knowledge and skills in practice while working in leading Latvian companies.

2.3. Assessment of the study implementation methods (including the evaluation methods) by providing the analysis of how the study implementation methods (including the evaluation methods) used in the study courses/ modules are selected, what they are, and how they contribute to the achievement of the learning outcomes of the study courses and the aims of the study programme. Provide an explanation of how the student-centred principles are taken into account in the implementation of the study process.

Modern teaching methods were used in the study process, they corresponded to the requirements. The study process took place in the classrooms (contact lessons: lectures, practical classes, projects, group work), out of LLU premises (traineeships, conferences), by preparing individual work (reports, presentations, course works) and creative work (projects). Traditional methods dominated in teaching methods: lectures, practical works and seminars.

The lectures were supported by modern computer technologies, multimedia projectors (portable and stationary) video materials, teaching aids and handouts.

Active learning forms were used in **seminars and practical classes** to promote analytical and creative thinking, develop communication skills, and the ability to delegate tasks: situation modelling (Microeconomics, Basic of Corporate Management), business games (Team Management), problem solving, discussions, seminars, educational research (Marketing), role plays (Basic of Corporate Management), individual work (Legal Basics of Entrepreneurship), tests, reports, essays (Business Ethics, Etiquette), case study, team and group work (Project Management).

The LLU e-learning environment offers support materials as well as various handouts for students' **independent work** (http://estudijas.llu.lv/). A course works and the qualification thesis are considered to be the form of students' individual work. The use of these methods stimulates and encourages independent, cognitive and research work.

The use of the above mentioned methods facilitates the implementation of the principles of student-centred learning and enhances the achievement of the learning outcomes of the study courses and the study programme.

In accordance with the Regulation No. 141 "Regulations Regarding the State Standard for First Level Professional Higher Education" of the Cabinet of Ministers as of March 20, 2001, not less than 30% of the study courses' volume should be implemented practically. This requirement is satisfied in the framework of the study programme, and the proportion is relevant to the aims of the study programme. The tasks of independent work and the methods of assessment are defined in the descriptions of study courses and they are implemented according to the programme of the particular study course.

The teaching staff of the Faculty of Economics and Social Development have written several course books, text books, teaching aids, collections of exercises and problems for practical classes. They are available at ESAF Information Centre of Studies and Research and libraries.

Student Workbooks, work sheets and handouts with tasks, exercises and problems have been created (Basic of Corporate Management, Project Management, Document Management) which are used in the practical classes for providing additional practice for students to apply the knowledge acquired during lectures using different methods.

Methodological guidelines for writing course works and the qualification thesis are available in the LLU ESAF website (http://www.esaf.llu.lv/lv/studiju-un-reglamentejosie-dokumenti).

The study process is organized in such a way that students are provided with an individual approach and feedback. Students receive support from the teaching staff both during lectures and during practical work. Students have a chance to talk with lecturers of the study courses during individual consultations both in person and using an individual e-mail of each lecturer (academic staff members' e-mail addresses are in one format name.surname@llu.lv). The academic staff members are entitled to provide **tutorials** to students according to the approved schedule, which is available in the ESAF website, LLU IS and the e-learning platform, as well in the institutions). Students have an opportunity to meet academic staff members after lessons on individual basis making an appointment in advance.

The assessment of the learning outcomes is an integral part of the study process, the aim of which is to evaluate the students' learning outcomes expressed in qualitative or quantitative terms. This is the way of providing feedback. The assessment is conducted in accordance with the Regulation No. 141 "Regulations Regarding the State Standard for First Level Professional Higher Education" of the Cabinet of Ministers as of March 20, 2001,

(https://likumi.lv/ta/id/6397-noteikumi-par-pirma-limena-profesionalas-augstakas-izglitibas-valsts-standartu) which includes assessment principles and requirements and "LLU Regulation of Studies" (https://www.llu.lv/sites/default/files/2016-04/Studiju_nolikums_2015.pdf) (See also Part II Chapter 1 sub-paragraph 6).

The assessment system is based on the following methods and principles:

- **summative assessment of positive performance**: the result is the sum of positive performance;
- **the assessment is mandatory**: students are required to obtain a positive assessment for acquisition of the compulsory content of the programme;
- **openness and clarity of requirements**: information about the aims and tasks is provided to each student at the beginning of the study process in the introductory classes, programmes of study courses and in the LLU course register;
- **the principle of diversity of assessment methods**: different assessment methods are used, including evaluation of tasks submitted in the e-learning environment;
- **relevance of assessment**: the content of the examinations must correspond to the content of the programmes of the particular study courses.

The achievement of learning outcomes is evaluated using qualitative and quantitative assessment:

- **qualitative assessment** uses 10-point system or "Passed" or "Failed" depending on the envisaged type of assessment of a respective study course;

- **quantitative assessment** means that the volume of the study course is expressed in credit points (CP).

The feedback is also provided by regular **tests, independent and practical assignments**, which must be defended. The main types of assessment used by the lecturers in the study programme "Business Studies" are tests (23 study courses), individual work assignments (19 study courses), tests with calculations (8 study courses) and quizzes (10 study courses).

During the traineeship students prepare the traineeship report which is defended in the presence of the commission. A reference from a supervisor of a traineeship from the company is taken into account.

Student-centred learning is implemented in different seminars, practical work assignments, presentations of traineeship reports during which students show the acquired knowledge, skills and competences, participate in discussions with other students and lecturers. Students also have the opportunity to attend conferences at various levels organized by ESAF and discuss current problems and their solutions.

Students are entitled to work individually on two course works. Methodological guidelines for writing course works are available in the LLU ESAF website (http://www.esaf.llu.lv/lv/studiju-un-reglamentejosie-dokumenti) which define common criteria for the evaluation of the course works. They are:

- the structure is relevant to the selected topic;
- the content of the course works corresponds to the topic, the aim and tasks;
- novelty;
- skills to draw valid conclusions and to make constructive, reasoned recommendations;
- appropriate use of the literature and sources;
- scientific language;
- the format and technical performance correspond to the requirements;
- skills to defend the work and the knowledge of the research topic.

Supervisors of course works conduct their evaluation according to the given criteria.

The criteria for the evaluation of the qualification thesis are described in the template review form of the qualification thesis (http://www.esaf.llu.lv/lv/studiju-un-reglamentejosie-dokumenti). The criteria evaluate both individual components of the thesis (abstract, introduction, theoretical part, empirical part, conclusions and recommendations) and an overall impression of the qualification thesis: technical performance, research quality, its visual and literary quality. A reviewer evaluates the qualification thesis according to the criteria. Students defend their thesis in the presence of the state examination commission.

2.4. If the study programme entails a traineeship, provide the analysis and assessment of the relation between the tasks of the traineeship included in the study programme and the learning outcomes of the study programme. Specify how the higher education institution/ college supports the students within the study programme regarding the fulfilment of the tasks set for students during the traineeship.

Professional traineeships are an integral part of the study programme. The necessity of traineeship outside education institutions is determined by the Regulation No. 141 "Regulations Regarding the State Standard for First Level Professional Higher Education" of the Cabinet of Ministers as of March 20, 2001, which states that the minimum volume of credit points for traineeships should be in the amount of 16 CP.

The study programme's "Business Studies" curriculum includes two professional traineeships in the total amount of 16 CP:

- Professional traineeship in the 3rd semester "Analysis and Accounting" – 8 CP;
- Professional traineeship in the 5th semester "Business" – 8 CP.

The programmes of traineeships have been developed on the basis of the aims and tasks of the study programme.

The procedure and supervision of traineeships of the study programme are based on its aims. The tasks were defined and included in the programmes of the traineeships and they are available in the EASF website (http://www.esaf.llu.lv/lv/studiju-un-reglamentejosie-dokumenti) and in the e-studies system.

The overall aim of a professional traineeship is to systematize, consolidate and extend theoretical and practical knowledge and generic skills as well as to acquire specific skills of the respective programme.

General tasks of traineeships:

- to ensure that students' theoretical knowledge is combined with practical work in order to evaluate the possibility to apply the knowledge acquired at the university in practice;
- to acquaint students with real-life situations in companies and to acquaint employers with potential employees;
- to enable entrepreneurs to engage students in day-to-day work activities and to assess their potential for work;
- to promote cooperation between companies and the university in order to better understand employers' expectations from young professionals.

The specific aim of the professional traineeship "Analysis and Accounting" is to get acquainted with the a company' performance indicators, to characterize and analyze the economic activity of the company. During the traineeship period:

- students' theoretical and practical knowledge and skills in characterizing economic activities of a company are systematized, strengthened and deepened;
- students' ability to understand the current regularities and principles of a company's economic development and the rational basis of business operations is developed;
- students' ability to work independently in conditions of the market economy, to conduct research with the purpose of making decisions for increasing of the company's efficiency is determined;
- skills to discover and analyse current problems, make reasonable decisions to solve the problems are improved;
- students' communication and team work skills are developed;
- students' skills of individual work, effective time management, work organization and independent acquisition of new knowledge are improved.

The specific aim of the professional traineeship "Business" is to get acquainted with a company's business operations and the organization of the company's business activities. During the traineeship period:

- students' theoretical and practical knowledge and skills in business operations are systematized, strengthened and extended;
- students' ability to understand the current regularities and principles of the economic development and the rational basis of a company's business operations is developed;
- students' ability to work independently in conditions of the market economy, to conduct research with the purpose of making decisions for increasing of the business operations' efficiency is determined;
- skills to discover and analyse current problems, make reasonable decisions to solve the problems are improved;
- students' communication and team work skills are developed;
- students' skills of individual work, effective time management, work organization and independent acquisition of new knowledge are improved.

During the Traineeship "Business" students acquire process of the business operations in various sectors of national economy by participating in the planning and organization of these processes. During the traineeship period the theoretical and practical knowledge about the company management process, its control, efficiency assessment and decision making is strengthened.

The tasks included in the traineeship fully contribute to the achievement of the study programme's learning outcomes. The traineeship strengthens the skills and competences related to the ability to perform business activities, planning, organization and control of the production process. During traineeship students also acquire analytical and evaluation skills of the company performance, which are directly related to the expected learning outcomes.

The traineeship placements in local government institutions provide an opportunity for students to acquire knowledge and understanding of production processes in the context of regional development.

Traineeship places, provision and work organisation are described in Part II Chapter 5 sub-paragraph 3 of the report "Traineeship Opportunities for Students".

2.5. 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 evaluations of the final theses.

The State Examination Commission contains a number of experienced professionals in the sector who assess final theses not only from a theoretical but also a practical point of view for the company concerned.

The majority of students work while studying in the area related to the qualification to be obtained or a similar one, which affects the choice of the final topic. Therefore, the themes of the qualification thesis may be divided into the following groups:

- Final theses related to the company where a student worked for while studying;
- Final theses related to the company where a student was appointed to during the traineeship period and thus was familiar with its business operations;
- Papers that described a company a student neither worked for nor was appointed to for the traineeship;
- Papers which analysed particular indicators of a group of Latvian companies and their dynamics at the specified time period.

Most often students in their qualification thesis focused on the analysis of business activities of a company, which fully corresponded to the learning outcomes of the study programme: students were familiar with business operations of the company, they were able to analyze and evaluate the results of the company's performance.

As regards the topics of papers, 75% of students on average either conducted the analysis of companies' performance in different sectors of economy or investigated companies' development possibilities, but a smaller number of students either designed a business plan of their own idea or explored some aspect of managing a business, such as personnel management.

The elaborated qualification theses were useful for improvement of the performance of a particular company; also the analysis of implementation of new management principles were recommended for application. The papers dealing with the analysis of particular indicators of a group of the companies were of less limited use.

To sum up, the topics of qualification theses mostly focused on issues from the micro-level perspective in relation to the content of the programme.

The average grade for defending qualification theses in the reference period was 7.54 points. 8.5% of the defended theses received the highest evaluation which was either "outstanding" or "excellent". The titles of the best qualification theses were the following:

- "Analysis of "Cēsu alus", Plc., Business Activities"
- "Description of Road Construction Company "Igate", Ltd., Business Operations",
- "Analysis of "Retailing Company "Kurši" Saulkrasti Shopping Centre",
- "Analysis of the Farm "Lanstrupi" Business Activities",
- "Characteristics of Business Activities of the Farm "Namdangas", Valdgale Parish, Talsi Municipality,",
- "Analysis of "Transportbetons MB", Ltd., Business Activities and Development Opportunities",
- "Strategy Analysis of "Latvian Rural Advisory and Education Centre, Ltd.".

2.6. Analysis and assessment of the outcomes of the surveys conducted among the students, graduates, and employers, and the use of these outcomes for the improvement of the content and quality of studies by providing the respective examples.

Student surveys are conducted in a number of ways. Students express their opinions or evaluate the teaching staff twice a year by filling in a questionnaire in LLU Information System online. The student survey is also organized once a year by the director of the study programme in order to find out **students' opinion** regarding the study process, the content of the study programme and organizational issues.

The analysis of the survey results concerning the content of the study programme and organizational issues show that 50% of respondents evaluated them as appropriate. But 45% of respondents suggested to increase the volume of the study courses. The survey conducted in 2018/2019 in comparison showed that all of the respondents evaluated the volume of the study courses as appropriate.

The majority of the respondents (60%) of the study programme considered the acquired competences suitable for the demands of the labour market.

The prevailing number of students (80 %) of the study programme "Business Studies" were not interested in studying abroad therefore they did not apply for mobility opportunities.

All of the surveyed students used LLU IS online system to obtain the information about the assessment results.

The prevailing number of students (86% on average) evaluated the level of the study programmes' acquisition as appropriate.

85% of the respondents evaluated the knowledge of the academic staff as "good".

The absolute majority of the surveyed students (95%) evaluated the attitude of the academic staff to students as "excellent" and "good".

The director of the study programme conducts a **graduate** survey after the completion of the studies. 60% of graduates on average assessed their knowledge as "very good" and "excellent" in the reference period.

The prevailing majority of graduates (77% on average) evaluated practical application of the knowledge gained in the study programme as "good" and "very good".

85% of respondents rated their readiness to do the job as "good" and "very good" and "excellent".

The provision of the study process with teaching aids and handouts was rated from "good" to "outstanding" by 85% of graduates.

The organization of the study process was rated from "good" to "outstanding" by 87% of graduates on average.

As regards the surveys of **employers**, they rated the professional readiness of students for the labour market as "excellent" in 30% of the cases and as "good" in 66% of the cases.

Employers rated students' competence at work as "excellent" in 60% of the cases and as "good" in 40% of the cases.

The employers' assessment of students' communication skills divided between "good" (39%) and

"excellent" (59%). To enhance the development of these skills, it was decided to include new study courses in the curriculum in 2017 that would improve communication skills. They courses were the following: Team Management, Customer Relationship Management, Event Management.

The practical knowledge acquired during the study process was rated as "good" (60 %) and "excellent" (31%) by the employers. The students' skills to work in a team, delegate tasks and fulfil responsibilities were evaluated as "excellent" by 70% of employers on average, "good" by 34% and "satisfactory" by 6% of employers. The study courses Team Management, Customer Relationship Management, Event Management contributed to the development of these skills.

The respondents who participated in the survey of employers had the following composition: 32% represented production companies, 38% represented service providers, 33% represented retailing sector, 6% were from agriculture sector.

The surveys of alumni of the programme and employers allowed understanding the need to introduce new courses or include some courses in the programme. In 2017, based on the recommendations, 11 courses were amended or re-included in the study plan. The courses that develop students' abilities and meet the requirements of the professional standard were included in the programme, for example, such courses as Team Management, Customer Relationship Management, Events Management.

 At the beginning of the reporting period, students recommended increasing the number of contact hours. In 2018, the number of contact hours per CP for part-time studies at LLU was increased from 5 h to 8 h.

2.7. Provide the assessment of the options of the incoming and outgoing mobility of the students, the dynamics of the number of the used opportunities, and the recognition of the study courses acquired during the mobility.

The students of the 1st level study programme "Business Studies" have not applied for the international mobility visits in the reference period. The results of the student survey show the students of the study programme "Business Studies" were not interested in studying abroad, since 80% of the respondents stated that they did not plan to go abroad.

III - DESCRIPTION OF THE STUDY PROGRAMME (3. Resources and Provision of the Study Programme)

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. Whilst carrying out the assessment, it is possible to refer to the information provided for in the criteria set forth in Part II, Chapter 3, sub-paragraphs 3.1 to 3.3.

Available study infrastructure, information sources and facilities, material and technical provision and funding are sufficient and appropriate for the implementation of the study programme and ensures achievement of the learning outcomes. (See Part II Chapter 3 Material and Technical Provision of the study direction)

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

III - DESCRIPTION OF THE STUDY PROGRAMME (4. Teaching Staff)

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

The academic staff members play an important part in providing high quality content to students in the study process and developing students' knowledge, skills and competences.

The LLU academic staff representing various fields of science are involved in the implementation of the study programme

Academic staff members from other LLU faculties are involved in the implementation of the programme:

- Forest Faculty (Department of Forest Use),

- Faculty of Environment and Civil Engineering (Department of Environment and Water Management),

- the Language Centre and Sports Centre.

As regards academic positions, all of them are represented by the academic staff members: professors, associate professors, assistant professors.

Table 3.2.

The number of academic staff members involved in the study programme "Business Studies" and their structure in the period 2013-2019

Position	2013/2014		2014/2015		2015/2016		2016/2017		2017/2018		2018/2019	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Professors	1	2.7	2	8	1	3.9	-	-	1	3.5	-	-

Assoc.prof.	2	5.4	2	8	3	11.5	3	12.5	2	7.2	1	5.6
Assist.prof.	6	16.2	5	20	5	19.2	3	12.5	6	21.4	4	22.2
Visiting assist.prof.	4	10.9	3	12	2	7.7	2	8.3	1	3.5	-	-
Lecturers	10	27	5	20	7	26.9	7	29.2	9	32.2	8	44.4
Visiting lecturers	14	37.8	8	32	8	30.8	9	37.5	9	32.2	5	27.8
Total	**37**	**100**	**25**	**100**	**26**	**100**	**24**	**100**	**28**	**100**	**18**	**100**

During the reference period, the distribution of the academic staff's positions involved in the implementation of the study programme varied, each year one or two professors, one to three associate professors, three to seven assistant professors, five to ten lecturers and visiting lecturers were employed. An active participation of young lecturers in the study process has been a positive trend.

The structure of the academic staff's positions may be characterized as stable during the reference period. The changes in the academic staff happened due to:

- Closure of the branches in 2014 and 2017;
- Significant changes in the curriculum in 2017, replacement of some study courses;
- In 2017/2018 no students were admitted in the study programme.

According to the previous analysis, 5 new teaching personnel began working for ESAF in the reporting period, 4 of them defended their doctoral dissertations or started doctoral studies. The highly qualified academic personnel have an opportunity to prepare new study materials faster and at higher quality. However, younger teaching personnel, the proportion of which has increased during the reporting period, prefer and use communication channels and technologies similar to those used by students. It promotes the formation of a favourable psychological climate for the learning process. The new teaching personnel make full use of distance learning, particularly the opportunities provided by e-learning, which are especially relevant for part-time studies. Students are offered opportunities to make full use of modern technological possibilities for studying the materials given in case they could not attend their lectures in person, submitting their assignments completed and papers beyond the lecture session, as well as communicating with their teaching personnel

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

The qualification and the professional development of academic staff members are determined by:

- *Law on Institutions of Higher Education of the Republic of Latvia* (1995);

- Regulation No. 391 of the Cabinet of Ministers (September 4, 2001) "*Procedure for assessment of scientific and pedagogical qualification of professor and associate professor*". The regulation determines the procedure by which the Board of Professors of the scientific field assesses scientific and pedagogical qualifications of a candidate for the position of a professor or associate professor;
- *LLU "Regulation on Academic Positions",* which defines the requirements for candidates for academic positions;
- Results of the student surveys regarding the quality of teaching staff, etc.

The number of teaching staff members elected in the academic positions increased during the reference period. Thus at the beginning of the reference period 49% of the academic staff members involved in the study programme had been elected in the academic positions, but 51% of them were visiting academic staff members (on the basis of an agreement for one year period), but at the end - 72% of the academic staff members were elected in the positions, and 28% of them had the status of visiting academic staff members.

The relevance of the academic staff is also evidenced by their scientific qualification, due to the fact that all the teaching staff members involved in the study process have a doctoral degree or master's degree.

Table 3.3.

Scientific qualification of academic staff members involved in the study programme "Business Studies" and their structure in the period 2013-2019

Indicators	Academic year					
	2013/14	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
	PhD					
Number	13	12	11	8	10	5
Share, %	35	48	42	33	35	28
	Master's degree					
Number	24	13	15	16	18	13
Share, %	65	52	58	67	65	72

The qualification of the teaching staff involved in the implementation of the study programme fully corresponds to the requirements for the study programme's implementation and regulatory enactments.

The changes in the statistical data of the academic staff was caused to the closure of the branches and the fact that in 2017/2018 no students were admitted in the study programme.

The number of assistant professors have increased from 12.5% to 22.2% thus the qualitative changes in the academic staff's composition may be described as positive (see The number of academic staff members involved in the study programme "Business Studies" and their structure in the 2013-2019 in Table 3.2.).

Changes in the structure of the academic staff's qualification were also influenced by the following:

- during the reference period four members of the academic staff involved in the implementation of the study programme defended their doctoral theses and became doctors of economics (4 members);
- some members of the academic staff left the work at LLU (3 members).

Every year LLU academic staff participate in professional development programmes in Latvia and abroad. In the reference period academic staff members:

- participated and also delivered reports in annual LLU Academic Conferences;
- took part in the competition of text books, course books and teaching aids;
- improved their English skills in the language courses;
- participated in the seminars arranged by LLU Communication and Marketing Centre;
- participated in teaching mobility in the framework of ERASMUS+;
- participated in trips of exchange of experience to companies in Latvia and abroad;
- attended the LLU professional development programme for university teaching staff "Innovations in Higher Education Didactics (160 hours);
- attended professional training events, seminars and courses organized by different organizations.

Appropriate professional qualification of the teaching staff and a set of measures for their professional development ensured achievement of learning outcomes in good quality. A centralized motivation system has been introduced for teaching personnel, which takes into account also their attendance of courses, exhibitions, conferences and seminars. The teaching personnel who have attended, for example, English language courses (6 teaching personnel in the reporting period) can prepare higher quality study materials, using the latest research findings available in the works of leading Latvian and European scientists. In 2018, Latvia University of Life Sciences and Technologies began implementing a project (8.2.2.0/18/A/014 "To Strengthen Academic Staff of Higher Education Institutions in the Areas of Strategic Specialization") within the project, 5 teaching personnel of the programme undergo or will soon undergo 180-hour foreign language training, 5 teaching personnel of the programme have internships in the leading companies of Latvia.

4.3. Information on the number of the scientific publications of the academic staff members, involved in the implementation of the 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 may be additionally specified (if applicable).

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).

4.5. Provide examples of the involvement of the academic staff in the scientific research and/or artistic creation activities both at national and at international level (in the fields related to the content of the study programme), as well as the use of the obtained information in the study process.

The involvement of the academic staff research activities is significant. Lecturers took an active part in scientific projects at national and international level. The findings of the research activities were reflected in scientific publications and their presentation to the audiences at conferences.

Many members of academic staff participated in various projects in the reference period (See Annex 6).

For example, an assistant professor participated in the projects below and used the acquired knowledge in the study course Creative Economy:

- RURAGRI ERA-NET European Commission´s 7th Framework Programme "Rethinking the links between farm modernization, rural development and resilience in a world of increasing demands and finite resources (RETHINK)",
- "Development of high value-added growing and harvesting technologies of industrial hemp (*cannabis sativa L.)*",
- HORIZON 2020 project "Data Driven Dairy Decisions for Farmers" (4D4F).

In 2013 an assistant professor participated in the project "Ex-ante Evaluation of Rural Development Program 2014-2020, adequacy of SWOT analysis and needs assessment of Research and Development Programmes in Agriculture". The results of the project were integrated in the content of the study course Economic Management Studies.

In 2013 an assistant professor was involved in the project **"**Strengthening Scientific Capacity in the Fruit, Forest and Information Technology Sectors by Providing Computer-Aided Research on Environmentally Friendly Cultivation Solutions, Product Development and Implementation" of the Institute of Horticulture. The project results and experience were shared in the content of the study course Analysis of Economic Activities.

An assistant professor and later an associate professor was involved in several projects during the reference period the results of which she used in teaching the study course Marketing:

- "Sustainable use of local resources (subterranean, forest, food and transport) – new products and new technologies (NatRes)", 3rd project "Sustainable use of local agricultural resources for the development of nutritious and healthy foods (FOOD), 3.1. subproject "Production of high-quality deer farming in sustainable farming conditions",
- " Development of new feed products to boost the productivity and competitiveness of the pig and poultry farming sectors",
- "Production of innovative poultry products using feed components based on forestry residues",
- "Development of technology to increase the shelf life of fresh meat",
- "Developing sustainable legume growing technologies and promoting their use to provide protein for food and feed production in Europe" (EUROLEGUME),
- "Alternative uses of biomass to sustain grassland biodiversity and ecosystem services.

An assistant professor was involved in the project "Linking a marginal abatement cost curve (MACC) of Latvian Agriculture GHG emissions with carbon sequestration and its accumulation in arable land,

permanent grasslands and wetlands", consequently, the findings of the project were integrated in the study course Bioeconomics.

Two associate professors in the reference period were involved in the ERASMUS+ project "Education in rural entrepreneurship through producing and valorising of medicinal and aromatic plants", which resulted in the teaching material "Entrepreneurship in Rural Areas through the Production and Exploitation of Medicinal and Aromatic Plants" the training course curriculum) "Entrepreneurship in Rural Areas through the Production and Exploitation of Medicinal and Aromatic Plants". They were used in the study courses Entrepreneurship, Economic Management Studies.

Two associate professors, two assistant professors in the reference period took part in the project "Economic Transformation, Smart Growth, Governance and the Legal Framework for Sustainable Development of State and Society - New Approaches to a Sustainable Knowledge Society" of the national research programme and included the acquired knowledge and experience in the study courses Innovation in Business, Marketing, International Economic Relations and others.

Two assistant professors were involved in the project "Agricultural sector GHG emissions analysis and economic assessment of emission reduction measures" in the framework of Programme 1.2. "Value and dynamics of Latvian ecosystems under the climate change (EVIDEnT)", of the subtask "Environment and Climate", the first Priority national research programme. The findings of the project were incorporated in the contents of the study course Bioeconomics.

An associate professor worked in the project "Use of electricity in motor vehicles of private persons". The research findings were used in the study course Project Management.

Two assistant professors were involved in the research "Development of Effective Business Model" within the project "Research on the competitive and efficient production of milk and meat". The research findings were integrated in the content of the study courses Creative Economics and Marketing.

The finding of an assistant professor during participation in the project "Youth in transition countries – innovative potential, new context, new challenges and new problems" were used in the study course Sociology.

The research findings and the acquired knowledge in the projects have been described in publications and disseminated in conference presentations. See Appendix 6 for information on publications, projects and presentations of the academic staff involved in the study programme.

4.6. 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 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).

Module teaching is not used in the study course. But some study courses are taught by two members of academic staff. For example, two lecturers taught the study course Economic Management Studies. Lectures were delivered by a professor, but practical classes were taught by a visiting lecturer thus cooperation in the team work was ensured.

The professional and pedagogical cooperation is necessary during the elaboration of the qualification theses when students are encouraged to meet academic staff and receive

consultations.

The academic staff cooperate through such mechanism as methodological commissions, boards of faculties. Members of the Methodological Commission evaluated and made recommendations for the improvement of the content of study courses when designing study course programmes. This process included elements such as the distribution of lectures and practical classes, the use of assessment methods, the content and others.

In the next reference period it is planned to promote the cooperation among members of the teaching staff and to involve several lecturers for teaching one study course.

The ratio of students to academic staff is 15.7 at the time of submission of the self-evaluation report. It is bigger number in comparison with the LLU average (13.4) result.

Annexes

III. Description of the Study Programme - 1. Indicators Describing the Study Programme		
Compliance of the joint study programme with the provisions of the Law on Institutions of Higher Education (table)		
Statistics on the students over the reporting period	Annex_13.pdf	13.pielikums.pdf
III. Description of the Study Programme - 2. The Content of Studies and Implementation Thereof		
Compliance of the study programme with the State Education Standard	Annex 14.pdf	14.pielikums.pdf
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard (if applicable)	15_Annex_EN.pdf	15_Pielikums_LV_KomZ.pdf
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)		
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	Annex_17.pdf	17.pielikums.pdf
Curriculum of the study programme (for each type and form of the implementation of the study programme)	Annex_18.pdf	18.pielikums.pdf
Descriptions of the study courses/ modules	Description_of_the_study_courses.rar	Studiju_kursu_apraksti.rar
Description of the Study Direction - Other mandatory attachments		
Sample of the diploma to be issued for the acquisition of the study programme.	Diploma_Bussiness_studies and supplement.rar	Diploms_Komerczinibas un pielikums.rar
Description of the Study Programme - Other mandatory attachments		
Document confirming that the higher education institution/ college will provide the students with the options to continue the acquisition of education in another study programme or at another higher education institution/ college (a contract with another accredited higher education institution/ college), in case the implementation of the study programme is discontinued	Agreement between LLU and RTU.docx	LLU_RTU_07012020_01000-4.1-e_2.edoc
Document confirming that the higher education institution/ college guarantees to the students a compensation for losses if the study programme is not accredited or the licence of the study programme is revoked due to the actions of the higher education institution/ college (actions or failure to act) and the student does not wish to continue the studies in another study programme	LLU confirmation_Business Studies.docx	LLU_apliecinajumi_ESAF_programmai_KomZ.edoc
Confirmation of the higher education institution/ college that the teaching staff members to be involved in the implementation of the study programme have at least B2-level knowledge of a related foreign language according to European language levels (see the levels under www.europass.lv), if the study programme or any part thereof is to be implemented in a foreign language.		
If the study programmes in the study direction subject to the assessment are doctoral study programmes, a confirmation that at least five teaching staff members with doctoral degree are among the academic staff of a doctoral study programme, at least three of which are experts approved by the Latvian Science Council in the respective field or sub-field of science, in which the study programme has intended to award a scientific degree.		
If academic study programmes are implemented within the study direction, a document confirming that the academic staff of the academic study programme complies with the provisions set out in Section 55, Paragraph one, Clause three of the Law on Institutions of Higher Education		
Sample (or samples) of the study agreement	Studiju_ligums_paraugs_EN.pdf	Studiju_ligums_paraugs_LV.pdf
If academic study programmes for less than 250 full-time students are implemented within the study direction, the opinion of the Council for Higher Education shall be attached in compliance with Section 55, Paragraph two of the Law on Institutions of Higher Education.		

Project Management

Title of the higher education institution	*Management, Administration and Management of Real Property*
ProcedureStudyProgram.Name	*Project Management*
Education classification code	*47345*
Type of the study programme	*Professional master study programme*
Name of the study programme director	*Dina*
Surname of the study programme director	*Bite*
E-mail of the study programme director	*dina.bite@llu.lv*
Title of the study programme director	*Dr.sc.soc.*
Phone of the study programme director	*63005721*
Goal of the study programme	*To educate highly qualified project managers to work on local, national and international projects in the public, private and non-governmental sectors.*
Tasks of the study programme	*1) to provide the knowledge necessary for the acquisition of the latest achievements in the field on theoretical and practical issues of project development, management and assessment;* *2) deepen understanding of the specific features of project management in different industries and sectors of the national economy;* *3) develop and improve project management and research skills.*

Results of the study programme	*Knowledge:*
	• in-depth knowledge of the social, economic and legal processes affecting project management at national and international level;
	• understanding of project management standards, methods and tools to be able to critically evaluate project management theories and methodological approaches; in-depth knowledge of current trends in project management.
	Skills:
	Professional skills:
	• Students are able to apply project evaluation methods in practice, IT methods in project management, coordinate financial, time and human resources, control implementation and sustainability of project results;
	• Students independently select, justify and apply appropriate project management methods and tools at different stages of the project life cycle; they are able to initiate and manage projects at different levels and of various types;
	• Students are able to manage project portfolio and programmes within a company, implement quality management and risk management principles in the project management.
	Soft skills:
	• Students are able to build and lead a project team, take responsibility for decision making, collaborate with project stakeholders, plan and coordinate communication within a project.
	Competence:
	• Students are able to ensure the achievement of the company's strategic goals with project management methods, provide project life cycle management;
	• Students develop and implement innovative ideas through project management techniques, including operating in difficult and unpredictable conditions.
Final examination upon the completion of the study programme	*Master thesis*

Study programme forms

Full time studies - 1 years, 6 months - latvian

Study type and form	*Full time studies*
Duration in full years	*1*
Duration in month	*6*
Language	*latvian*
Amount (CP)	*60*
Admission requirements (in English)	*Professional Bachelor's degree or second level professional higher education*

Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	*Professional Master's degree in project management*
Qualification to be obtained (in english)	

Places of implementation

Place name	City	Address
Latvia University of Life Sciences and Technologies	JELGAVA	LIELĀ IELA 2, JELGAVA, LV-3001

Full time studies - 2 years - latvian

Study type and form	*Full time studies*
Duration in full years	*2*
Duration in month	*0*
Language	*latvian*
Amount (CP)	*80*
Admission requirements (in English)	*An academic Bachelor's degree or higher professional education*
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	*Professional Master's degree in project management*
Qualification to be obtained (in english)	*project manager*

Places of implementation

Place name	City	Address
Latvia University of Life Sciences and Technologies	JELGAVA	LIELĀ IELA 2, JELGAVA, LV-3001

III - DESCRIPTION OF THE STUDY PROGRAMME (1. Indicators Describing the Study Programme)

1.1. Description and analysis of changes in study programme parameters that have taken place since the issue of the previous accreditation certificate of study direction or the license of study programme if study programme is not included in the accreditation page of the study direction

Since the issue of the last accreditation certificate for the study direction, the following changes have been made in the parameters of the study programme "Project Management":

1. The volume of the study programme - 60CP and 80CP - has been specified according to the requirements of the normative documents.
2. The study programme is not implemented in form of part time and extramural studies as students did not choose these study forms.

1.2. Analysis and assessment of the 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 in the different study forms, types, and languages.

The number of students in the study programme gradually increased in the time period from 2013 to 2019. It was influenced by several factors:

- there was an increasing necessity for the project management skills in the labour market of Latvia;
- since 2015 the state-financed places have been available in the study programme. In the autumn semester of 2019 there were 13 state-financed places available which signified that the study programme was recognized at the institutional level;
- positive students' testimonials;
- a gradual and consistent adjustment of the programme to the current labour market demands and the profession standard of a project manager. Since 2014 / 2015 academic year the part-time studies have not been implemented. The programme is implemented in the Latvian language, full-time;
- students are encouraged to resume interrupted studies.

The statistics show that there were 14 first year students in the autumn semester of 2013, but then in the autumn of 2019 the number of students was 33, which was by 2.3 times more (see the Annex). The statistical data show that the master's degree programme "Project Management" was mostly chosen by graduates of different LLU faculties and programmes. But one third of applicants were graduates of other higher education state and private institutions in Latvia, such as University of Latvia, Riga Stradins University, Riga Technical University, Liepāja University, Daugavpils University, Riga Teacher Training and Education Management Academy (RPIVA), RISEBA University of Applied Sciences, Ventspils University of Applied Sciences, Vidzeme University of Applied Sciences, National Defence Academy of Latvia, Turiba University, EKA University of Applied

Sciences, State Police College, Information Systems Management Institute. Master students of the study programme were with varied work experience and different experience in work with projects. Recent graduates of undergraduate level studies, who considered project management to be a promising field, studied alongside students with 15-20 years of the project management experience willing to enrich their theoretical knowledge.

The total number of students who graduated from the programme "Project Management" was 70 in the reference period (see the Annex). The number of graduates had the tendency to grow due to the overall increase in the number of students in recent years.

In the reference period the number of students who discontinued studies was 45 in the programme (20 with academic education, 25 – professional education) or 13.4% from the number of the admitted students. The reasons for discontinuing studies were mostly related to the fact that students failed to fulfil the obligations of the agreement (11 students or 24%) or they suspended studies at their own request (16 students or 35.5%). As students often apply simultaneously for several study programmes during the enrollment process, some students did not commence their studies at all (8 cases or 17.7%). There are occasions, when those master students who work, have problems with finishing their master thesis, therefore they choose to take an academic leave. Even though the majority of students returned from the academic leave, the reason of discontinuing studies in 8 cases (or 17.7%) was due to the fact that students failed to return from the academic leave. (See the Annex).

1.3. Analysis and assessment of the interrelation between the name of the study programme, the degree or professional qualification to be acquired or the degree and professional qualification to be acquired, the aims, objectives, learning outcomes, and the admission requirements.

The development and implementation of the programme were based on the legislation (the Law on Institutions of Higher Education of the Republic of Latvia, the Regulation on Opening and Accreditation of Study Directions of the Cabinet of Ministers, Regulations on the State Standard of Second Level Professional Higher Education" of the Cabinet of Ministers) and the requirements of the project manager profession standard as well as LLU internal rules and regulations.

The admission requirements are appropriate and sufficient to achieve the learning outcomes relevant to the quality and duration of the studies; the enrollment of students takes place in accordance with the procedures and criteria approved by LLU. The learning outcomes to be achieved correspond to the aim and tasks of the programme and the content of the programme. The degree and professional qualifications awarded are dependent on the learning outcomes to be achieved and the content of the study programme.

The programme has developed in accordance with LLU strategic goals in bioeconomy and sustainable territorial development.

III - DESCRIPTION OF THE STUDY PROGRAMME (2. The Content of Studies and Implementation Thereof)

2.1. Assessment of the relevance of the content of the study course/ module and the compliance with the needs of the relevant industry and labour market and with the trends in science. Provide information on how and whether the content of the study course/ module is updated in line with the development trends of the relevant industry, labour market, and science. In 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.

The curriculum of the study programme and content of study courses are designed to achieve generally accepted standards in project management, as well as to train specialists for the Latvian labor market. The content design is based on the following:

- In the autumn of 2019, the research findings of "Dynamic University", Ltd., on the demand trends of labour force were published (LLU project No. 8.2.3.0/18/A/009). The researchers analysed the group of study programmes of "Business studies, administration and management" and forecasted that high-level specialists with flexible and interdisciplinary management skills will be required in the future (especially communication, cooperation, planning, problem solving skills will be important). The results of the study confirmed the importance of the project management programme for the labour market.
- According to project management experts' opinion, project management in Latvia was often interpreted and applied in practice in different ways. In addition, the lack of project managers in Latvian labour market hindered efficient spending of the EU funding, moreover, failures occured in large-scale projects (https://lnpva.lv/uncategorized/inguna-lazdina-kuze-projekta-vaditajs-amats-vai-profesija).
- The faculty in cooperation with the Latvian National Project Management Association (hereinafter referred as: LNPVA) worked on identification of problems in the project management and institutionalization of project management in Latvia;
- The research findings of several master theses described actions in Latvian companies and even in certain sectors that did not comply with project management standards. Therefore Master's degree students are entitled to acquire knowledge, skills and competences that are overall more advanced than they are in the labour market situation on average in Latvia. During the studies master students are trained to evaluate different aspects of project management in different companies and to adapt project management tools according to the situation of each company.

It should be noted that the curriculum does not correspond to very advanced project management in companies in all respects, for example, regarding the use of specific IT tools or sophisticated risk calculations. However, students can gain insight into specific project management issues during guest lectures, field trips to various companies, as well as through the participation of the faculty in the LNPVA activities and the use of the latest literature in the teaching of study courses. It should be mentioned that several lecturers are professional project managers who therefore ensure the application of practical experience in the study process. Also, from 2020/2021 it is planned to incorporate the latest information technologies in the project management study programme in cooperation with teaching staff of the Faculty of Information Technology, LLU.

The compliance of the study content to the latest developments in the field and scientific development tendencies was provided by inviting guest lecturers, field trips to companies, working in cooperation with the LNPVA. In addition, teaching staff members participated in the project management conferences and initiated cooperation with colleagues abroad (for example, in

Ukraine, Finland, Germany).

The initiative of master students to develop master theses on innovative topics was supported, for example, in 2018 the Master's thesis on sustainable project management was highly evaluated by the examination commission, and in 2019 the thesis on the application of project management in implementation of social innovation was finished. The assessment of the master theses was based on such criteria as integration of the latest developments in project management and students' ability to find solutions to specific problems.

Master students were involved in the realization of scientific projects and they participated in the creation of new knowledge, for example, in the national research programme "Latvian heritage and future challenges for national sustainability" of the project "Development of a sustainable and cohesive Latvian society: solutions to demographic and migration challenges" (2018-2021). As the field of specialization of LLU is bioeconomy, students and lecturers of the project management programme have the capacity to cooperate with other faculties and scientific institutes in the development and management of innovative projects.

Overall, LLU study programme "Project Management" focused on preparing qualified project managers for the needs of the Latvian labour market, also in regions, gradually integrating the project management perspective into the public, private and non-governmental sectors.

2.2. Assessment of the interrelation between the information included in the study courses/ modules, the intended learning outcomes, the set aims and other indicators, the relation between the aims of the study course/ module and the aims and intended outcomes of the study programme. In 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.

- Compulsory study courses provide students with knowledge of the context in which project management is implemented (e.g., Public Administration, Business Planning);
- Compulsory study courses include knowledge of project management standards and methodology (e.g., Methodology of Project Management, Practical Project Management), as well as specific aspects of project management such as human resources, legal aspects of projects and IT tools in project management;
- Within the framework of the programme students are provided with knowledge on projects in the field of bioeconomy, which is the development direction of LLU, as well as students' skills to work out methodology for social research and application of relevant research methods are trained;
- Elective courses provide students with the opportunity to enrich their knowledge in specific areas related to the project management (Project Procurement Procedure and Quality Management) and provide up-to-date knowledge on business innovations, knowledge management and global processes;
- The aim of the traineeships is to ensure the transfer and approbation of the acquired knowledge and skills in the selected company by exploring and evaluating the project management methods used in it.

The content of each study course is designed in accordance with the aims, tasks and learning outcomes of the study programme, as well as the current professional standard. Learning outcomes as well as descriptions of individual study courses are organized according to the principle

"knowledge - professional skills - generic skills - competences". Knowledge, skills, competences are ranged to make knowledge assessment more transparent. Each study course has a certain aim and function to achieve the learning outcomes. The development of the content of study courses is mutually coordinated, so that topics do not overlap (see Annex for mapping of the study courses and their descriptions).

2.3. Assessment of the study implementation methods (including the evaluation methods) by providing the analysis of how the study implementation methods (including the evaluation methods) used in the study courses/ modules are selected, what they are, and how they contribute to the achievement of the learning outcomes of the study courses and the aims of the study programme. Provide an explanation of how the student-centred principles are taken into account in the implementation of the study process.

The realization of the study program and evaluation of the results was ensured by means of the mapping of the study courses (see Annex). The content of study courses and methods used focused on the achievement of study results according to knowledge, skills and competence.

The study process took place in the format of lectures and seminars, as well as independent work. Academic staff members used different methods in their work to deliver the material and evaluate knowledge. More detailed methods can be found in the description of each study course, but such methods as discussions, pair and group work, case study, problem solving analysis, modelling, role plays, tests and self-assessment, reports, *World Cafè* method were most often used, and the results were assessed in the course assessment with pass/fail, a grade or the examination. For example, in the study course "Methods of Social Research" students wrote a peer review of a master thesis application thus practicing their research skills and an ability to critically evaluate research approaches in the project management. The students' professional skills were trained by preparing the project application for the planning stage or the feasibility study. Taking into account students' different experience and knowledge in the field of project management, teaching staff used study methods that promote exchange of information and experience, as well as critical thinking and ability to justify their opinion.

Teaching staff members follow the LLU Regulation of Studies and other regulatory documents in the evaluation of the study work (see the section on study evaluation in the report for details). Master students were given the feedback on the submitted independent work in e-studies or in the following classes. Master students were informed about individual study results and similar errors in the course. Teaching staff members also provided consultations via e-mail or e-learning environment.

Alongside the lectures and seminars students had the opportunity to attend guest lectures (e.g., representatives of "XTM Bygg AB", Ltd., "Kantar", Ltd., Latvian National Project Management Association, association "Latvian Civic Alliance", Jelgava City Council, CFLA etc.) and to take part in study trips (students attended events of experience exchange arranged by LNPVA in the Latvian companies in cooperation with the association). Students participated in the events arranged by ESAF with the aim to relate theoretical knowledge with the real situation in companies: "The Graduate Week" which was held twice a year and "The International Week".

The study process implements the principles of student-centred learning because the study process takes into account the students' needs by providing different learning pathways in the study programme, using a variety of teaching methods, providing a fair and transparent assessment

procedure, and providing feedback on the acquired knowledge, skills and competences. Students are invited to evaluate each course at the end of the course, and students' comments are taken into account both in the further planning of the course (e.g., in terms of content and teaching methods used) and in the further development of the programme. Students can take advantage of the faculty's procedure of submitting proposals and receive support and information from lecturers, programme directors and technical staff.

2.4. If the study programme entails a traineeship, provide the analysis and assessment of the relation between the tasks of the traineeship included in the study programme and the learning outcomes of the study programme. Specify how the higher education institution/ college supports the students within the study programme regarding the fulfilment of the tasks set for students during the traineeship.

The regulation "Regulations on the State Standard of Second Level Professional Higher Education" of the Cabinet of Ministers determines that the compulsory part includes the traineeship with 6 CP for the duration of 1.5 year and the traineeship 26 CP for the duration of 2 years.

The aim of the traineeship is to strengthen the theoretical knowledge, to acquire the competences appropriate to the study program and to acquire the practical skills necessary for project management work. The specific traineeship tasks, knowledge, skills and competences are designed for each traineeship separately (See the programmes of study courses).

The traineeship "Project Management" (6 CP) envisaged in the curriculum for students with professional bachelor's education covers the management of the whole project life cycle which involves an in-depth study of the principles, strategies, specifics of project management, various methods in practical project management. There are three traineeships envisaged in the curriculum for students who have academic bachelor's degree: "Project Development", "Project Management" and "Project Evaluation" (26 CP) which involves an in-depth study of individual components of the project management process, such as project development principles, specifics, different methods in practical project development work etc.

The traineeships in the programme "Project Management" are closely related to the learning outcomes of the programme; they are focused on an in-depth study of relationship between theoretical knowledge and skills. The achievement of the traineeship tasks was ensured through the exact definition of the aims and tasks of the traineeship in accordance with the mapping of the knowledge, skills and competence of the programme. The acquired knowledge in theoretical study courses was approbated at practical project work by evaluating the experience of the respective company and its model of project management. The traineeship tasks have been regularly updated in the light of global trends and the growing awareness of project management in the Latvian labour market.

Traineeships for students are provided by various state institutions, municipalities, private companies and non-governmental organizations. They are: Ministry of Environment Protection and Regional Development of the Republic of Latvia, the insurance company "Balta", Plc, Rural Support Service, Latvian Rural Advisory and Education centre, Ltd, "Swedbank", Plc., Zemgale Planning Region, Riga Stradins University, Central Statistical Bureau of the Republic of Latvia, Department of Fire Emergency Services, municipality councils of Ādaži, Kandava, Koknese, Pļaviņas, Tukums and others, the association "Positive Thought", Zemgale NGO centre, etc. During the process of presenting traineeship reports, students describe current issues in companies regarding project

management procedures (such as communication problems at the moment), as well as cases where students have initiated and implemented a business-friendly tool for project management (e.g., streamlined documentation, improved information flow system).

Employers appreciated trainees' professional skills (drafting a project application, preparing documents) and generic skills (communication, teamwork) as well as their theoretical background. In a number of cases, a trainee received a job offer from a traineeship company. In 97% of the cases, the trainees' knowledge, skills and competence were rated as 'excellent' and 'good'.

The traineeships contribute both to the consolidation of theoretical knowledge and to the acquisition and improvement of a project manager's professional skills for successful participation in the labour market, as well as they provide the information and research required for writing of a master's thesis.

It is envisaged within the framework of LLU study programme to support the growth of every student in the field of project management, to assist in finding a place for traineeship, including a placement in a higher education institution or various partner organizations, including also abroad (ERASMUS+ mobility) (see also LLU and ESAF procedures for traineeships).

2.5. 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 evaluations of the final theses.

During the reference period, 70 master theses were defended. It is possible to group the chosen topics in thematic groups. One of the topics often selected for master papers concerned the project life cycle, its analysis and management. Students analysed both theoretical approaches regarding the project life cycle phases and the research on project management practices implemented by certain companies. The largest number, or 19 defended theses, referred to this thematic group. Also, students explored certain aspects of the project management process, such as project portfolio management, risk management, a project team (18 theses).

A significant part of the projects in Latvia are implemented with the support of the EU therefore EU funding and assessment of the respective project management was an important topic for the research. Students' master theses analyzed the experience of various companies in implementing EU projects, focusing on the regional aspect and programmes in specific sectors of the economy, such as agriculture. The master theses covered a wide range of themes of public, private and non-governmental sectors.

In addition, theses were related to master students' work, thus they extended the research in that direction and addressed job-related topics in their theses. One of the most successful examples was the master thesis from 2016, which conmtained a feasibility study on curved floor coverings, and later it was supported and successfully developed under the LEADER programme. As the graduate stated, "*My master thesis was my success story*".

A particular emphasis should be placed on students' interest in specific and innovative research topics, such as the use of awareness practices in project management (2016), sustainable project management (2018), project management in social innovation (2019) and others.

The teaching staff encourages students to evaluate critically existing project management practices and not to be afraid of developing an alternative solution of the project management process.

Therefore, several master theses were devoted to the evaluation, development and approbation of different methodologies.

Recent trends in project management in Latvia show that more and more attention is paid to project manager's competences, communication management in projects, evaluation of information and publicity measures, IT methods in project management, etc.

The State Examination Commission recommended the best master theses for various competitions, publication and practical implementation. The titles of several of the most highly rated works are below:

- Application of Agile project management method in national IT projects: analysis of project "E-health";
- Public procurement management process in civil engineering projects: An example of a European Union Agricultural Fund for Rural Development Gravel Road Reconstruction Project;
- Feasibility study and development of the project application "Curved Wood Flooring";
- Feasibility study and concept development of the project "Development of Youth Volunteering System in Tukums Municipality";
- Development of planning methodology for investment projects in IT environment;
- Risk assessment in EU projects: An example of science development projects;
- Early risk identification methods in insurance company "X" Projects", Plc.
- Stakeholder management in retail non-specialized store projects
- Project evaluation process in NGO project competitions organized by municipalities: An example of municipalities of Zemgale Planning Region
- Project Manager Competences in Public Relations Agencies;
- Analysis of management and socially innovative potential of projects funded by the Media Support Fund
- Building Information Modeling (BIM) system application problems in a construction company, application in construction project management
- Sustainable project management and its implementation in Latvia

In the period 2013-2019, the average mark awarded to the master theses defended was 7.1 on a 10-point marking scale. Gradually, the quality of master theses and, consequently, higher marks were awarded. For example, in January 2014, 8 master theses were submitted to the State Examination Committee, which were awarded an average mark of 5.5 points, while in January 2019, 6 master theses were submitted to the Committee, defending them with an average mark of 8.2 points.

On the whole, the analysis of the themes of master theses and the evaluation of the theses let to make a conclusion that students of project management programme are not only aware of trends in project management in Latvia, but they are also able to have a deeper analysis of individual topics.

2.6. Analysis and assessment of the outcomes of the surveys conducted among the students, graduates, and employers, and the use of these outcomes for the improvement of the content and quality of studies by providing the respective examples.

In the summer of 2017, a survey of employers regarding theoretical and practical suitability of graduates from different programmes to labour market demands was conducted at LLU. Employers of graduates from project management programme also participated in the survey. Overall,

employers' opinion of the programme's graduates was positive, suggesting that the theoretical and practical training of graduates was sufficient, but in some cases better practical skills would be needed. Respondents had to evaluate knowledge, skills and competences mentioned in the questionnaire (for example, students are able to explain and discuss aspects of the relevant scientific field, able to use modern technologies and innovations in their work, capable of working on a team, competent to express opinions on professional matters, they understand professional ethics, etc.), employers marked the responses "rather achieved" or "fully achieved". Employers also highlighted the importance of traineeships in the recruitment process of the staff, encouraging LLU to cooperate more closely in the provision of traineeships.

At the end of each year of study, the programme director organizes either a discussion or the submission of written proposals to enable students to assess the quality of study courses and provide proposals to improve the study process. Overall, students of project management were active in providing the feedback offering detailed proposals for improving study courses and for improving administrative procedures at LLU (for example, the possibility to apply for information queries electronically). As far as possible, student proposals have been taken into account (see section of the report on the involvement of ESAF students in improving the content and quality of studies).

The cooperation with experts and field professionals has also been developed in the process of defending master theses. The State Examination Commission is chaired by Valdis Avotiņš, Dr.chem., an expert in project management from Ventspils High Technology Park. The commission includes representatives of public, private and non-governmental institutions representing different fields of project management expertise. For several years, the commission members were Inese Didže, the director of Dobele Gymnasium and a project manager, and Uldis Dūmiņš, the director of "Zemgale NGO Centre" and the chairman of the board of the association "Latvian Civic Alliance". There is an ongoing cooperation with Arta Kronberga, the head of development projects for "State Real Estate", Voldemārs Bariss, Dr.phil., a visiting associate professor, the director of the LLU Centre for International Cooperation, as well as Guntis Bērze, Mg.proj.mgmt, a visiting lecturer, the programme's graduate, and a project manager of "Empower", Ltd. There is a LNPVA's representative, the head of the internal audit department of "Latvian road maintainer" Ingūna Lazdiņa, who has participated in the State Examination Commission since 2018.

The quality of studies and the achievement of learning outcomes is also proved by an increase in the number of students who have enrolled in LLU following the advice of their friends/acquaintances, as well as the graduates' feedback on studies in project management programme.

"While studying project management at LLU, I got exactly what I expected when I arrived to study this program! I gained not only the basics of specific methods and actions, but I also developed the way of thinking, which makes it possible to look at things, activities and projects in real terms with understanding and analysis, which, in my opinion, is the most important." (a graduate of 2018)

"I obtained my bachelor's degree in economics in 1999. I was aware that, if I wanted to participate in the labour market, it was not enough with my knowledge, skills and experience, which I acquired during many years, it was necessary to learn new knowledge. During studies in the master's degree programme "Project Management", I gained not only professional competence, but it was an opportunity for me to look at ongoing processes at my work and in the professional field in which I worked, in general, from a different point of view. In-depth understanding of project management processes and new knowledge (the research work carried out during studies) resulted in my decision to change my work and start working as a project manager. The studies and invested work in developing of the master thesis were valuable not only due to a new professional qualification,

but it also completely changed my thinking regarding ongoing processes in institutions (planning, development of strategies, quality management). All of the mentioned before is a proof of the fact that I have met professional and knowledgeable lecturers in my years of studies, who were able to give not only the necessary knowledge, but also motivate to achieve my goals."(a graduate of 2018)

2.7. Provide the assessment of the options of the incoming and outgoing mobility of the students, the dynamics of the number of the used opportunities, and the recognition of the study courses acquired during the mobility.

LLU offers a wide and diverse range of mobility opportunities suitable also for project management, however, master students of the project management used them comparatively seldom. The reason was that almost all master students had a job and they had to combine studies with work. In the reference period there were four outgoing mobility cases: in 2015 the 1st year master student attended the course "Sustainable agriculture for rural development" in A.Stulginskis University in Kaunas (Lithuania) in the framework of the BOVA programme; in 2016 the 1st year master student studied project management in the 2nd semester in the Warsaw University of Applied Sciences (Poland). In 2019 ERASMUS+ traineeship opportunities were used by two persons. A 2nd year master student trained in Italy, in the company of Agriturismo Beatilla, but a recent graduate spent the autumn semester of 2019 in Croatia.

The recognition of the results acquired in the partnering universities abroad during ERASMUS+ mobility is performed by the director of the study programme according to the Rector's decision "On Academic Recognition Procedure at LLU" (available: https://www.llu.lv/lv/erasmus-studijas; http://www.llu.lv/lv/erasmus-prakse). The protocol of mobility academic recognition is issued on the basis of the submitted transcript of records (and previously approved academic recognition protocol of intention) or a certificate of the traineeship period.

A number of the study courses included in the programme are offered for incoming ERASMUS+ students.

III - DESCRIPTION OF THE STUDY PROGRAMME (3. Resources and Provision of the Study Programme)

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. Whilst carrying out the assessment, it is possible to refer to the information provided for in the criteria set forth in Part II, Chapter 3, sub-paragraphs 3.1 to 3.3.

LLU and ESAF provide the material and technical provision, available infrastructure, information

resources and facilities financial basis for the implementation of the programme. The lectures and classes mostly are held in the main building of LLU Lielā street 2, in Jelgava, where Institute of Social Sciences and Humanities is situated. Due to recent renovation and IT support for STEM fields, the classrooms are equipped to meet present requirements and lecturers can use a variety of teaching methods.

The institute has a small office with a selection of literature on project management where there are opportunities to work independently. Students have access to LLU library, as well as information, material and technical provision, which is provided by LLU and ESAF (see annexes for more details).

The study course "Information Technology in Project Management" is implemented in the computer classroom of the faculty of Information Technologies, where there is the necessary software. In addition, students of the project management programme has the opportunity to get acquainted with ongoing projects at the LLU Science and Project Development Centre.

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

III - DESCRIPTION OF THE STUDY PROGRAMME (4. Teaching Staff)

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

The study progamme contained 3.39 staff loads (1.63 (1.5 year programme) and 1.76 (2.0 years programme) based on the LLU academic staff payroll regulation. Several professors and associate professors accounted for almost one complete load, which was positive, because academic staff should have the highest academic qualification level to deliver lectures for master students. Assistant professors and visiting assistant professors accounted for 1.14 load and lecturers and visiting lecturers – 1.39 load. Visiting lecturers were professionals of the industry who taught study courses aimed at providing specific professional knowledge and skills. Industry professionals were also involved as traineeship supervisors, members of traineeship evaluation commissions, and reviewers of master theses. The employment of professionals allowed to significantly improve the quality of the study content.

Two lecturers are also graduates of the project management programme. Currently, two visiting lecturers are doctoral students with the aim of becoming more involved in the programme. It is planned to involve another visiting lecturer from the next study year (see below more detailed information about the academic staff at LLU and ESAF).

The ratio of elected academic staff and the other teaching staff is 51% against 49%, which should be evaluated positively, because academic staff and professionals of the field are equally involved

in the implementation of the professional study programme.

	Professor	Assoc.prof.	Assist.prof	Visiting Assist.prof.	Lecturer	Visiting lecturer	**Total**
Project management [2 years]	0.06	0.36	0.42	0.19	0.05	0.68	**1.76**
Project management [1.5 years]	0,0.6	0.38	0.28	0.25	0.06	0.60	**1.63**
Total	**0.12**	**0.74**	**0.70**	**0.44**	**0.11**	**1.28**	**3.39**

Compared with the situation at the beginning of the reporting period, the number of professors has remained relatively unchanged, yet the number of associate professors and assistant professors involved in the delivery of the programme has increased. Workload distribution tables reveal that currently the programme has a larger number of FTE workloads, while the most significant changes in the composition of teaching personnel occurred owing to the fact that at the beginning of the period, a high proportion of courses were taught by guest lecturers; currently the leading teaching personnel of the programme are represented by professors, associate professors and assistant professors. During the reporting period, one lecturer defended the doctoral dissertation and became an assistant professor, one assistant professor was elected an associate professor. Professional development ensures a higher quality of teaching, which is evidenced by an increase in the number of students and master theses produced at high quality. The composition of teaching personnel has partly changed, and industry professionals are constantly involved in delivering some courses.

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

The qualification of the lecturers involved in the programme's implementation corresponded to the requirements of the programme and the profile of the respective study courses:

- study courses providing knowledge and skills in project management methodology, standards and practical project management were taught by academic staff with theoretical and practical experience and project management education;
- study courses providing an understanding of the context in which project management takes place, involving professionals from the Institute of Social Sciences and Humanities, other ESAF institutes and other faculties (ITF).

The analysis of distribution of positions among academic staff shows that 22 academic staff members were involved in the teaching process, including one professor, 5 associate professors, 8

assistant professors, 3 visiting assistant professors, 1 lecturers and 4 visiting lecturers. The ratio of lecturers and students was 1:16.5 (in 1.5 year programme) and 1:18.4 (in 2.0 year programme) as of October 1, 2019, which was above the average university level (13.4 per one academic staff member). The changes encountered during the reference period were related mostly to the increase of the qualification level of the teaching staff (promoted to be elected in higher positions, obtained the doctoral degree).

Title of the programme/ academic staff		Project management [2 years]	Project management [1.5 years]
Professor	*Work load for study process, h*	52.00	52.00
	Number	1	1
Associate professor	*Study process, h*	330.75	346.75
	Number	5	5
Assistant professor	*Study process, h*	397.10	265.10
	Number	8	7
Visiting assistant professor	*Study process, h*	183.13	239.13
	Number	3	3
Lecturer	*Study process, h*	50.75	56.25
	Number	1	2
Visiting lecturer	*Study process, h*	657.30	573.70
	Number	4	4
Total work load for the study process, h		1671.03	1532. 93
Total number of persons		22	22

The lecturers actively used the opportunities offered by LLU and ESAF to improve their professional qualification and participated in seminars and courses in relation to their research interests, the

courses taught, in order to integrate the acquired knowledge into the respective study courses, for example "Innovations in the bioeconomy sector of the higher education", "Territorial statistics and its Application" etc. (see for more details in CVs in the Annex). At least once in six years academic staff members attend professional development programme for university teaching staff "Innovations in Higher Education Didactics", attend courses and seminārs outside LLU.

4.3. Information on the number of the scientific publications of the academic staff members, involved in the implementation of the 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 may be additionally specified (if applicable).

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).

4.5. Provide examples of the involvement of the academic staff in the scientific research and/or artistic creation activities both at national and at international level (in the fields related to the content of the study programme), as well as the use of the obtained information in the study process.

The participation of the academic staff in various national and international research projects and activities contributed significantly to the implementation of the study programme. Below there are some research projects in different fields:

- National research programme's EKOSOC-LV project 5.2.3 "Latvian rural and regional development processes and opportunities in the context of the knowledge economy", project No. 5.2.8. "Processes for cultural development, preservation of environmental diversity and urbanisation in the context of balanced development of Latvia", project 5.2.7. "Renewal of society by reducing risks of depopulation, promoting population growth and links with the diaspora for the successful transformation of Latvia's economy" (2014-2018);
- the national research programme "Latvian heritage and future challenges for national sustainability" of the project "Development of a sustainable and cohesive Latvian society: solutions to demographic and migration challenges" (2018-2021), which involved students of the project management programme in the project's activities and development of master theses;
- OECD research "Intellectual services related to the draft of the main report of the Latvian

agricultural innovation system"

- "Education in rural business through the production and promotion of medical products and aromatic plants";
- "Linking a marginal abatement cost curve (MACC) of Latvian Agriculture GHG emissions with carbon sequestration and its accumulation in arable land, permanent grasslands and wetlands" etc..

The teaching staff members involved in the implementation of the programme actively participated in international and national activities related to project management.:

- A visiting lecturer during the doctoral studies in the Project Management programme at the Department of Automatization and IT Sciences of the Kiev National University of Civil Engineering and Architecture (a doctoral thesis "To increase the company's efficiency by adapting in IPMA OCB project management platform"), participated in the conferences arranged by the university (for example, "Project Management in the Conditions of Global Changes", "Project Management in Consumer Society"), as well as in the masterclasses of Professor S.Bušujevs (PhD in Engineering Sciences) and Professor N.Bušujeva (Dr.ing.). The Kiev National University of Civil Engineering and Architecture has a close cooperation with the Project Management Programme of the Dortmund University of Applied Sciences in the framework of which Ukranian master students have an opportunity to study in Germany and obtain a joint degree diploma, but German project management master students acquire experience in project management in Kiev. Our lecturer also participated in the lectures of Prof. Dr.phil. Karsten Wolf and took part in the field meeting of the International Project Management Association (IPMA). As a result of the cooperation with Prof. S.Bušujevs, our visiting lecturer was awarded internationally recognised IPMA project management certificates of D and B levels: assistant of a project manager and senior project manager which testified the relevant theoretical and professional qualification;
- A visiting lecturer has considerable experience in managing and coordinating international and EU affairs, political issues and projects. It is important to explain the European Union policy developments to students because it provides insight into the scope, depth, geography and sectoral policies of the EU funds. The visiting lecturer is currently participating in the international project "STEP" as a leading researcher / national coordinator, of the European Union (EU) Research and Innovation Support Programme Horizon 2020" (2019–2021), she represented Latvia in international conferences (on September 12, 2019, in the EU conference "Citizens' Energy Forum", Dublin, Ireland; on November 29, 2018, in the conference "Customer Conference on Digitalization" by the Council of European Energy Regulators, Brussels, Belgium). Another visiting lecturer is the 3rd group vice-president (2015–2020) of the European Economic and Social Committee, NGO forum, and the representative of Latvia in European Commission European Consumers Advisory work group (2017-2019);
- The director of the programme in cooperation with LNPVA participated in the work group of drafting of a new profession standard and promoted the project management in Latvian public space.

The learning process gets the following benefits from the activities: 1) materials created as a result of research projects implemented are used in the delivery of courses; 2) topics and problems are researched in-depth by applying innovative approaches; 3) project partner guest lectures on topical matters and science popularization are delivered to students.

4.6. 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 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).

There are two study courses in the project management programme which are taught by two members of academic staff (two academic staff members taught in one course, and three members - in the other). This requires the teaching staff to harmonize the content of the study course, teaching methods and the assessment procedure.

The institute responsible for the implementation of the programme holds methodological seminars and discussions on the supervision of master theses, teaching of study courses, current events in the field of project management, etc. At the meeting of the institute the study course programmes as well as the themes of the master theses are reviewed and approved. The information is exchanged in seminars, meetings of institutes, dean's office meetings, and through personal contacts. During the development process of study course programmes, the lecturers coordinate the topics covered in the course content. The analysis of the existing study course programs shows that with some minor exceptions (for example, the interested parties) the study content does not repeat in the course outline, which indicates the cooperation between the lecturers.

The director regularly organized meetings of teaching staff involved in the programme to discuss development directions of the programme.

The cooperation between the teaching staff members of the master level study programmes took place both in the implementation of separate study courses and the organization of guest lectures. For example, the guest lecture of a representative from LNPVA (2017) was organized primarily for project management students but master students of Economics, Business Management and Sociology of Organizations and Public Administration programmes attended as well.

As of 1 October 2019, the ratio of students and teaching personnel was 1:16.5 (1.5-year programme) and 1:18.4 (2-year programme), which was above the average university ratio (13.4 students per teaching personnel).

Annexes

III. Description of the Study Programme - 1. Indicators Describing the Study Programme		
Compliance of the joint study programme with the provisions of the Law on Institutions of Higher Education (table)		
Statistics on the students over the reporting period	Annex 13.pdf	13_pielikums _LV.pdf
III. Description of the Study Programme - 2. The Content of Studies and Implementation Thereof		
Compliance of the study programme with the State Education Standard	Annex_14_EN.pdf	14_pielikums.pdf
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard (if applicable)	15_pielikums_EN.pdf	15_pielikums_LV.pdf
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)		
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	Annex 17.pdf	17_pielikums_LV.pdf
Curriculum of the study programme (for each type and form of the implementation of the study programme)	Annex_18.pdf	18.pielikums.pdf
Descriptions of the study courses/ modules	Description_of_the_study_courses.rar	Studiju_kursu_apraksti.rar
Description of the Study Direction - Other mandatory attachments		
Sample of the diploma to be issued for the acquisition of the study programme.	Diploma and supplement_PM_EN.rar	Diploms_pielikums_PV_LV.rar
Description of the Study Programme - Other mandatory attachments		
Document confirming that the higher education institution/ college will provide the students with the options to continue the acquisition of education in another study programme or at another higher education institution/ college (a contract with another accredited higher education institution/ college), in case the implementation of the study programme is discontinued	Agreement between LLU and RTU.docx	LLU_RTU_07012020_01000-4.1-e_2.edoc
Document confirming that the higher education institution/ college guarantees to the students a compensation for losses if the study programme is not accredited or the licence of the study programme is revoked due to the actions of the higher education institution/ college (actions or failure to act) and the student does not wish to continue the studies in another study programme	LLU confirmation_Project Management.docx	LLU_apliecinajums_programmai_Projektu_vadiba.edoc
Confirmation of the higher education institution/ college that the teaching staff members to be involved in the implementation of the study programme have at least B2-level knowledge of a related foreign language according to European language levels (see the levels under www.europass.lv), if the study programme or any part thereof is to be implemented in a foreign language.		
If the study programmes in the study direction subject to the assessment are doctoral study programmes, a confirmation that at least five teaching staff members with doctoral degree are among the academic staff of a doctoral study programme, at least three of which are experts approved by the Latvian Science Council in the respective field or sub-field of science, in which the study programme has intended to award a scientific degree.		
If academic study programmes are implemented within the study direction, a document confirming that the academic staff of the academic study programme complies with the provisions set out in Section 55, Paragraph one, Clause three of the Law on Institutions of Higher Education		
Sample (or samples) of the study agreement	Studiju_ligums_paraugs_EN.pdf	Studiju_ligums_paraugs_LV.pdf
If academic study programmes for less than 250 full-time students are implemented within the study direction, the opinion of the Council for Higher Education shall be attached in compliance with Section 55, Paragraph two of the Law on Institutions of Higher Education.		

Agri-food business management

Title of the higher education institution	*Management, Administration and Management of Real Property*
ProcedureStudyProgram.Name	*Agri-food business management*
Education classification code	*45345*
Type of the study programme	*Academic master study programme*
Name of the study programme director	*Gunta*
Surname of the study programme director	*Grīnberga - Zālīte*
E-mail of the study programme director	*gunta.grinberga@llu.lv*
Title of the study programme director	*Dr.oec*
Phone of the study programme director	*63021041*
Goal of the study programme	*Provide students with theoretical knowledge and practical competences in the agri-food industries and entrepreneurship, promote leadership skills and critical thinking to prepare students for international careers, including research, in leading agri-food companies and organisations.*
Tasks of the study programme	*1. To provide in-depth knowledge of contemporary theories and research methods in management science, sub-branches and interdisciplinary areas.* *2. To improve skills to independently analyse, plan and manage agri-food business functions in the view of primary and secondary sectors.* *3. To strengthen students' critical thinking skills and a creative approach in solving complex scientific and professional problems, promote leadership skills for international careers in leading companies and organizations in the agri-food sector.* *4. To strengthen the skills to independently develop competitive and/or innovative products, processes or techniques in professional activities in the leading companies of agri-food sector.*

Results of the study programme	Upon completion of the master's degree study programme, students will have:
	Knowledge
	• Comprehensive and in-depth knowledge of current theories and research methods in management science, sub-branches and interdisciplinary areas, as well as recent findings, thus providing an understanding of processes and relationships that ensure a balance between business competitiveness and sustainable economic development.
	• Extended knowledge and understanding of agri-food value chains and their management, which ensures the ability to integrate knowledge of multidisciplinary areas for scientific and practical research.
	Skills
	• Students are able to apply complex problem solving skills in agri-food business management, they understand the importance of innovation and implementation process in entrepreneurship. They are able to select and apply appropriate methodology for competition assessment and to independently design, plan, and manage sustainable business and marketing strategies to enhance a company's competitiveness in the global market.
	• Students understand the basic principles of formation of socially responsible corporate culture as well as ethical consequences of business decisions in agriculture entrepreneurship in the context of globalization.
	Competence
	• Students are able to plan and critically evaluate investment projects in food production and agriculture by demonstrating critical thinking and in-depth analysis during problem solving. Students are able to demonstrate ethical and socially responsible leadership skills and a manager's skills in a variety of problem situations.
	• Effective communication and networking skills that ensure the ability to organize and participate in decision-making process, as well as the ability to represent a company in negotiations, participate in discussions with agribusiness management professionals and policy makers, provide arguments on complex and / or systemic agri-food business and bioeconomy issues. Students are able to integrate knowledge from different disciplines and thus contribute to the generation of new knowledge, the development of research or professional methods, they demonstrate awareness of and ethical responsibility for a potential environmental and societal impact of scientific results or professional activities.
Final examination upon the completion of the study programme	Master thesis 20 CP (30 ECTS)

Study programme forms

Full time studies - 2 years - english

Study type and form	Full time studies
Duration in full years	2
Duration in month	0
Language	english

Amount (CP)	*80*
Admission requirements (in English)	*Bachelor's degree or second level professional higher education English language skills of at least B2 level*
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	*Master of Social Sciences in Management*
Qualification to be obtained (in english)	

Places of implementation

Place name	City	Address
Latvia University of Life Sciences and Technologies	JELGAVA	LIELĀ IELA 2, JELGAVA, LV-3001

III - DESCRIPTION OF THE STUDY PROGRAMME (1. Indicators Describing the Study Programme)

1.1. Description and analysis of changes in study programme parameters that have taken place since the issue of the previous accreditation certificate of study direction or the license of study programme if study programme is not included in the accreditation page of the study direction

In the period since the issue of the licence, the following changes have been made in the parameters of the study programme:

1. Extramural studies have not been introduced for full time studies because students did not choose this option;
2. The name of Aleksandras Stulginskis University, which is involved in the implementation of the joint study programme, was changed to Vytautas Magnus University.

1.2. Analysis and assessment of the 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 in the different study forms, types, and languages.

The first admission to the academic master's degree study programme "Agri-food Business Management" was held in the spring semester of 2018/2019 academic year, when five students were admitted to the programme (four from LLU and one from VMU). All of the immatriculated students have successfully passed the study courses of the 1st semester and are continuing their studies. The second admission was held in the autumn semester of 2019/2020 academic year and 15 students enrolled in the programme (one from LLU and 14 from EMU). None of the students has been exmatriculated up to now.

It is positive that the total number of admitted students has tripled; however, the main difficulty for organizing the study process is the arrangement of the documentation of the third-country nationals due to a long procedure of arranging admission documentation. This creates situations where students who are interested in studying in this programme receive visas and residence permits very late and thus they are no longer able to be on time for the beginning of the study process. In such cases students are looking for opportunities to enrol in other private universities with more flexible admission deadlines and easier requirements for students who are late for the studies.

Annex 13 provides detailed statistics on students in the reporting period.

1.3. Analysis and assessment of the interrelation between the name of the study programme, the degree or professional qualification to be acquired or the degree and professional qualification to be acquired, the aims, objectives, learning outcomes, and the admission requirements.

The *title* and *the qualification level* of the study programme "Agri-food Business Management" is closely related to the priorities set by the European Union, i.e., to ensure economically viable food production and a stable food supply while respecting food safety requirements with the focus on rural economy, animal welfare, social and environmental issues. To address these priorities, the study programme provides students with in-depth knowledge, extended skills and practical competences in the field of agriculture, food processing and business management.

The **aims, tasks and learning outcomes** are consistent with each other and build a stable framework for the content of the programme ensuring students' academic and professional preparedness both qualitatively and quantitatively for a career of a manager in agricultural / food production companies, food processing companies, agricultural consultancy firms, research centres, governmental and non-governmental organizations, environmental protection and regional development institutions, as well as for an academic career. Students have the right to continue studying either at LLU doctoral programme "Agrarian and Regional Economics" or any other relevant doctoral programme after gaining their master's degree.

The study courses of the programme "Agri-food Business Management" are grouped into successive study modules, which combine lectures in classrooms and practical application of theories and research findings of agro-business management in practice during field trips to agri-food companies, as well as in practical classes in the university's scientific laboratories. Such a format of the study process provides in-depth and extended knowledge in the social sciences and agri-food business management with the specialization in agricultural and food production, as well as scientific and research skills relevant to the academic master's degree level to applicants who are graduates of the bachelor's degree programme or the 2nd level professional higher education of any field. Therefore, the **admission requirements** determine that those applicants may be eligible for admission who have successfully graduated either any bachelor's degree programme or the 2nd level professional higher education programme or who have completed higher education until 1994. The programme is implemented in the English language; therefore it is a mandatory requirement to have the English language proficiency at least at the level B2 (a document confirming the English language proficiency of a certified institution should be submitted). If an applicant does not have an internationally recognized English proficiency certificate, the Admission Commission arranges an entrance examination of the English language which is implemented by the staff members of LLU Language Centre.

The indicators of the study programme are mutually related, and they correspond to the strategic goal of the university which is excellence in the research and academic activities (https://www.llu.lv/lv/strategija), which envisages preparing of internationally competitive professionals who are able to contribute to the sustainable economic development of the bio-resource industry promoting the efficiency of production processes and increasing the competitiveness of companies.

III - DESCRIPTION OF THE STUDY PROGRAMME (2. The Content of Studies and Implementation Thereof)

2.1. Assessment of the relevance of the content of the study course/ module and the compliance with the needs of the relevant industry and labour market and with the trends

in science. Provide information on how and whether the content of the study course/ module is updated in line with the development trends of the relevant industry, labour market, and science. In 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.

The analysis of the information provided by the Food and Agriculture Organization of the United Nations regarding the prospects of the agricultural sector on a global scale reveals that global overproduction of food is not expected and the demand for sustainable agricultural productivity and innovation will increase (http://www.fao.org/3/a-i6583e.pdf, www.nozare.lv). Therefore, the study programme of agri-food business management implemented in the three Baltic States provides students with opportunities to acquire relevant knowledge demanded by labour market on specific features of agri-food industries, bioeconomy development and international business management in the Baltic States.

The content of the master's degree programme "Agri-food Business Management" has been developed in close relation with the Development Strategy (2015-2010) of the Latvia University of Life Sciences and Technologies (LLU) (https://www.llu.lv/index.php/lv/strategija). The university's vision is to become one of the leading universities of science and technologies in the Baltic Sea region.

The goals of the university's education programme and its action plans were designed to: 1) increase the capacity of LLU to prepare internationally competitive intellectual potential, especially in those areas of national economy, which are included in the Latvian Smart Specialization Strategy; 2) promote the internationalization of the LLU by becoming a known, recognized and demanded provider of higher education in the international environment and involve highly qualified foreign academic staff in the LLU education process. Consequently, a great attention has been paid to the improvement of the joint master's degree programme "Agri-food Business Management", implemented by Latvia, Lithuania and Estonia as it promotes the internationalisation of LLU and educates specialists for two of the bioeconomy sectors included in the Latvian Smart Specialization Strategy: agriculture and food production. The study programme consists of modules. The modules "**Bioeconomics**" and **"Operations"** provide extensive knowledge of the system of bioeconomy theories, agricultural production and food business processes, as well as practical skills in the management, development and commercialization of food products. The modules **"Leadership", "Finances", "Strategies"** and **"Marketing"** integrate the acquisition of professional knowledge in agribusiness management and the development of specialized professional skills. Therefore, the content of the programme ensures interdisciplinary approach that combines three closely related fields of science: agriculture, food industry and business management and is in compliance not only with the strategy of LLU but also with common economic development directions of the EU.

The Programme Committee steers and supervises the adjustment of the content of study courses to the trends in industries, labour market needs and the latest research results by organizing annual interviews and discussions with researchers, conducting surveys among employers and students. In 2019, the evaluation of the study programme's content was performed in the framework of the project No.8.2.3.0/18/A/009 supported by ESF funding "Expert services from industries for evaluation of the content of study programmes and making recommendations", in which Latvian and foreign experts expressed their opinions regarding the current content of the programme and perspectives for its further development. The results of the project will be analysed in the

Programme Committee of partner universities. The study programme "Agri-food Business Management" is an *academic master's degree* study programme, therefore the development of research skills and competences is <u>an essential part of the study content based on the analysis of individual problems of agricultural production, food industry and business management as well as the interaction of common problems in these three sectors</u>. LLU Research Programme (LLU Development Strategy for 2015-2020, https://www.llu.lv/sites/default/files/2017-03/Strate%CC%84g%CC%A7ija%20gara.pdf) focuses on interdisciplinary research, and LLU faculties have accumulated impressive knowledge and experience. As academic staff members from different faculties and institutes are involved in the implementation of the master's degree programme "Agri-food Business Management", the content of study courses is being updated regularly following the latest research findings and results obtained from research projects related to the LLU priority research fields. For example, the study course *"Innovation of Food System"* in the framework of **"Operations"** module incorporates the latest research findings on food safety aspects, research on new products of plant and animal origin and their nutritional value, research on biologically active substances in raw materials for food and products. The academic staff members involved in teaching of the study course *"Operations and Supply-chain Management in Agribusiness"* have participated in several international research projects which analysed basic agricultural resources through environmentally friendly technologies.

As regards social sciences, the modules **"Bioeconomy"** and "**Marketing**" include the information on the latest research findings regarding the economics of sustainable bio-resources, sustainable development opportunities of territories, the efficiency of production processes and the competitiveness of companies. The academic staff involved in these modules have acquired the latest relevant information during participation in different international projects.

"The Research" module is designed to strengthen students' research capacity by providing advanced knowledge on research methods and understanding of scientific and interdisciplinary research. At the end of their studies, students choose a topic of their master's thesis by themselves depending on their scientific and professional interests. Usually supervisors help students to select a topic which is in line with agricultural and food science development trends. Also, students may choose the topic which has not been studied previously but touches upon aspects of international agri-food business in another country, climate zone or region of the world.

2.2. Assessment of the interrelation between the information included in the study courses/ modules, the intended learning outcomes, the set aims and other indicators, the relation between the aims of the study course/ module and the aims and intended outcomes of the study programme. In 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.

The modules **"Bioeconomics", "Leadership"**, are implemented in Estonia and include study courses "*Agricultural Economics and Policy*", "*Research Methods*", "*Corporative Culture and Human Resource Development*", "*Cooperative Management*". They are compulsory courses which, in accordance with the study programme's aim, <u>*provide theoretical knowledge and its approbation in the agri-food sector and business management field, ensure the acquisition of specialized knowledge of the latest findings and modern research methods in bioeconomy and provide an in-depth understanding of agri-food value chains and conditions for their economically feasible and sustainable development*</u>. The module "Bioeconomics" develops students' ability to integrate

knowledge of multidisciplinary fields in further scientific and practical research activities and elaboration of their master's thesis, while the module "Leadership" promotes understanding of the system of human resources management and develops management skills.

The modules **"Strategies", "Finances",** are implemented in Lithuania, and they include compulsory study courses "*Strategic Management of Agribusiness*", *Managerial Accounting and Control*", "*Finance Management*" and limited choice study courses "*Agribusiness Planning and Evaluation of Investment Projects*". These study courses focus <u>on improvement of students' soft skills which are important for business management to evaluate and financially justify alternatives to strategic business decisions and development of students' professional skills to independently analyse, plan and manage agri-food business functions in the primary and secondary sectors, and ability to critically evaluate investment projects in food production and in agriculture</u>.

LLU is responsible for implementing both compulsory study courses and limited choice study courses which are included in the modules **"Operations" and "Marketing"**. The compulsory study course "*Integrated Marketing Communication in Agri-food Business*" is included in the module "Marketing". The aim of this course is to provide students with extended theoretical knowledge on the latest theoretical aspects of marketing and current issues in integrated marketing communication, focusing on the specific features of marketing of agri-food products and the public relations of companies. Thus the study course corresponds with the aim and enabling tasks of the master's degree programme as it <u>provides both theoretical and practical knowledge in marketing that enhances students' creativity and leadership in the promotion of products using modern methods as well as the ability to maintain public relations with various target audiences.</u>

The limited choice study course "*Operations and Supply-chain Management in Agribusiness*" is included in the module "Operations". The aim of this study course is to provide students with the theoretical knowledge and practical skills in agricultural production and food supply chain formation and management in relation to the aim of the study programme, deepen students' understanding of agricultural and food business processes, the analysis in the primary and secondary sectors, as well as <u>develop professional skills to plan, organize, manage, control production systems and processes in agri-food companies</u>.

Likewise, the study course "*Innovation of Food System*" is a limited choice course and it is included in the module "Operations". Its aim is to provide students with the theoretical knowledge, practical competence and leadership skills needed to manage, develop and commercialize new products in the food industry. This course contributes to the programme's aim by providing <u>the specialized knowledge and competences necessary for innovation in the companies of the food industry.</u>

The limited choice study course "*International Marketing in Agri-food Business*" is included in the module "Marketing" and its aim is to provide students with the necessary <u>professional knowledge and specialized skills to develop, manage and control competitiveness of agri-food products on an international scale</u> in different geopolitical contexts and various market competition conditions. It is essential of any export-oriented agricultural and food entrepreneurship and therefore precisely matches the aims and learning outcomes of the study programme.

All courses are related to the aim of the master's programme. The aim and the content of each course provide students with both theoretical knowledge, practical skills and competences significant for agricultural production, food industry and entrepreneurship, thus preparing them for international careers in leading agricultural and food companies and organizations.

2.3. Assessment of the study implementation methods (including the evaluation methods)

by providing the analysis of how the study implementation methods (including the evaluation methods) used in the study courses/ modules are selected, what they are, and how they contribute to the achievement of the learning outcomes of the study courses and the aims of the study programme. Provide an explanation of how the student-centred principles are taken into account in the implementation of the study process.

The study process is implemented by means of contact lessons in classrooms, individual studies, consultations, assessment methods as well as study trips.

The academic staff members actively apply different teaching methods and techniques.

- Lectures are face-to-face presentations of the topic with the help of illustrations and other teaching aids by academic staff members. Lectures are used to convey information on contemporary theories and research methods in management, its sub-disciplines and interdisciplinary areas. During lectures students become aware of the processes and relationship among them that provides the balance between competitiveness of agri-food companies and sustainable agricultural development.
- Practical classes are designed to use and deepen students' theoretical knowledge. The information acquired during lectures is applied or more detailed information is searched on the topic using software etc. Students strengthen their knowledge and understanding acquired in lectures concerning agricultural production and food value chains, their management; students develop skills to integrate knowledge of multidisciplinary areas in scientific and practical research.
- Seminars are designed to facilitate discussions between students or groups of students on a specific topic. Students develop communication and networking skills, ability to explain and discuss complex or systemic issues in the agri-food business and bioeconomy.
- Case-study method is used to enhance individual or group work aimed to have an in-depth analysis of a concrete case. The task of this method is to enable students to present or reasonably explain the completed individual work or a group-work with a cognitive, research or analytical focus on a particular topic or company's experience to the lecturer and / or peers. The involvement of students in case-studies enhance their ability to plan and critically evaluate introduction of different agricultural or food products, food and agricultural production development projects as well as enhance students' critical thinking in problem solving, decision taking, abilities to conduct additional research.
- Study trips are arranged to meet company managers and professionals, perform observations, conduct interviews and field research.

The teaching methods used in the programme are described in more detail in the programme of each study course (see Annex 19).

The overall learning outcomes of the programme are evaluated, analysed and approved at several levels: ESAF methodological commission of master's degree studies, EASF Council, the joint Programme Committee of partner universities, LLU administration meetings, LLU Board of Studies and the Senate. The implementation of student-centred learning principles is strengthened by cyclical review of methods used in the study courses based on student surveys and interviews as well as student participation in the work of the Programme Committee.

A regular assessment of learning outcomes is determined by the Law of Higher Education Institutions and LLU regulations: "The Regulation of Studies", "Regulation on Final Assessment". The main principles of assessment of the learning outcomes of the study courses are described in

more detail in the sub-section "*Evaluation of methods and procedures used to assess student achievement*" of the 2nd section. The volume of each study course of the master's degree study programme "Agri-food Business Management" is 5 CP (7.5 ECTS) and there is an examination or a formal test with a grade at the end of each course, when a lecturer or the commission assesses the knowledge and skills acquired in the study course or its part. The examinations and formal tests are scheduled according to the curriculum. Only those students are admitted to the final assessment who have fulfilled the requirements of the study course (passed tests, individual works etc.). If a student has not taken an examination or a test at the appointed time (in the lesson schedule or examination schedule), it is considered to be an academic debt. The settlement procedure of academic debts is regulated by the respective regulations by LLU, VMU and EMU.

Learning outcomes are defined both for the study programme as a whole and for each individual study course. Credit points for the programme and study courses are related to learning outcomes. The curriculum shows that learning outcomes of individual study courses form overall learning outcomes of the whole programme and students know and understand the overall results of the study programme and the results to be achieved in separate courses. Criteria for assessing student achievement are based on learning outcomes (the grade indicates whether and to what extent learning outcomes have been achieved).

The academic staff members regularly control the students' knowledge and skills during the semester, using the assessment methods (tests, reports, homework etc.) described in the extended programme of the study course. The assessment methods for each course are available in the description of the course and provides approaches to encourage active learning. The study course description specifies the criteria for the assessment of learning outcomes, the structure of the cumulative assessment system and the methods of assessment of learning outcomes. In order to make the study process more flexible and to offer different learning pathways, the academic staff members at the beginning of the semester explain the procedure of implementation of the study course and assessment procedure, which are also available to students in the e-studies environment.

Various types of assessment in the master's degree study programme "Agri-food Business Management" are used in the courses of the programme. Concerning study courses which develop *"hard skills"*, the individual work with analysis of information sources and/or analysis of calculations accounts for a large part (45%) of assessment; these study courses ensure cognitive development, i.e., analytical and information management knowledge in order to gather, systematize, synthesize, critically evaluate sources, to select and use appropriate research methods. On the other hand, group work assessment method is more often (25%) used in the study courses which mostly develop "*soft skills*"; these study courses focus on emotional intelligence and develop such skills as communication, collaboration, value transfer, flexibility and leadership skills.

The study process is organized according to the study course consistency system. Students are admitted to the next year after the successful completion of each study course scheduled in the curriculum. The assessment system of learning outcomes and description of the assessment criteria are publicly available in LLU website https://www.llu.lv/en/study-guide-documents, as well as in the websites of partner universities.

In addition to contact lessons, all study courses provide additional self-study opportunities in the e-studies environment where students, depending on the specifics of their learning style, can prepare for the tests in different ways, e.g., by completing knowledge self-assessment tests, reading literature recommended in the study courses and watching videos.

In addition to e-studies online, students can use attractive learning environment premises at the faculty. ESAF Information Centre of Studies and Research provides students with the space for

creative recreational and group work. The students' opinion is taken into account in the decision-making process concerning the programme's study procedure and quality assurance. Every year a students' representative is appointed for the participation in the Programme Committee, where the methods and achievement of the learning outcomes are one of the central issues.

2.4. If the study programme entails a traineeship, provide the analysis and assessment of the relation between the tasks of the traineeship included in the study programme and the learning outcomes of the study programme. Specify how the higher education institution/ college supports the students within the study programme regarding the fulfilment of the tasks set for students during the traineeship.

2.5. 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 evaluations of the final theses.

Not applicable because the first admitted students were in the second year of studies during the development of the self-assessment report in 2019 / 2020.

The table characterizing the compliance of the study programme with the State Education Standard is available in Annex 14.

Mapping of the study courses in the study programme with learning outcomes is available in Annex 17.

Curriculum of the study programme is available in Annex 18.

Descriptions of the study courses are available in Annex "Description of the study courses".

2.6. Analysis and assessment of the outcomes of the surveys conducted among the students, graduates, and employers, and the use of these outcomes for the improvement of the content and quality of studies by providing the respective examples.

In 2017, the survey of potential employers was conducted in Latvia, Lithuania and Estonia to find out the opinion of entrepreneurs of agri-food sector regarding the necessity of the launching the joint programme. The survey included 62 representatives of companies, cooperatives and the public sector organizations, performing business activities not only in the Baltic States, but also in other EU Member States and the third countries. One half of the respondents considered that there was a shortage of professional and highly qualified managers in the agricultural production and food processing sector and the demand for such managers might increase in the future (54% of respondents). Moreover, 87% revealed that they would be willing to hire graduates of the programme "Agri-food Business Management" in the future, but 13% of respondents indicated that they would not be interested, which may be explained by the fact that sole traders and public

sector managers also were among the respondents in the survey. The respondents selected the most important skills which are necessary for managers of agri-food companies, and they are the following:

- understanding of economics and politics of agriculture, their practical application in business planning and organization;
- ability to assess agri-business environment, as well as local and global trends in the agricultural and food production entrepreneurship;
- understanding of negotiation strategy and the skill to apply it;
- ability to organize and manage supply chains, organize procurement;
- ability to organize and manage product flow in agri-food chains in national and international markets;
- ability to forecast and evaluate the progress and results of the processes in the agri-food business in order to assess the product quality and risks;
- ability to analyse and forecast the situation in national and international markets.

The knowledge, skills and competences mentioned by respondents have been included in the programmes of the study courses "*Agricultural Economics and Policy*", "*Corporate Culture and Human Resource Development*", "*Cooperative Management*", "*Managerial Accounting and Control*", "*Finance Management*", "*Research Methods*", "*Operations and Supply-chain Management in Agribusiness*".

Respondents stated that the most important personal qualities and skills for a manager are the following: creativity, entrepreneurship, teamwork, strategic thinking, ability to adapt to change, knowledge of foreign languages. The understanding of the importance of these qualities and acquisition of skills have been integrated in the following study courses "*Innovation of Food System*", "*Strategic Management of Agribusiness*", "*Agribusiness Planning and Evaluation of Investment Projects*", "*International Marketing in Agrifood Business*". After the 1st semester of 2019, in-depth interviews were arranged with four students at Vytautas Magnus University. All the interviewed students emphasized their opportunity to gain unique experience working under the guidance of experienced and multinational academic staff as a relevant benefit of the study programme, which significantly helped them to develop intercultural communication and leadership skills. The students emphasized that the acquired courses provided them with up-to-date knowledge in specific areas of agri-food industry, thus helping them to achieve their aim to become specialists demanded in the market of the Baltic States who are able to work with the latest technologies and develop innovations in bioeconomy sectors.

In order to extend the range of topics of agri-food industry suitable for students, BOVA University Network *(the Baltic Forestry, Veterinary and Agricultural University Network)* provides exchange opportunities to master students in any of the universities included in the network to participate in additional in-depth learning in specialized areas that interest them. For example, in the academic year of 2018/2019 students could apply for six different courses: "Forest interference and ecosystem services: approaches to data processing and modelling" (Estonia), "Land information management for sustainable development in the Baltic States" (Estonia), "Application of modern technologies in geodetic elevation system determination" (Lithuania), "Comparative animal welfare and practical evaluation" (Estonia), "Sustainable agriculture for rural development" (Lithuania), "Packaging waste" (Estonia) (http://www.bova-university.org/) and studies with highly qualified foreign academic staff in the multicultural environment. In addition to BOVA University Network exchange programme among the universities of the Baltic States, LLU has signed more than 100 Erasmus+ agreements with partner universities in Europe and Scandinavia. Students can apply for Erasmus+ mobility beyond the borders of the Baltic States with the aim to enrich their knowledge and their understanding of the cultural and business environment in Europe and develop students'

communication skills with academic staff and students from different cultures.

2.7. Provide the assessment of the options of the incoming and outgoing mobility of the students, the dynamics of the number of the used opportunities, and the recognition of the study courses acquired during the mobility.

Upon a successful completion of the 1st semester, students may apply for Erasmus+ mobility at the LLU International Cooperation Centre. According to the mobility procedure, master students can study in one of LLU Erasmus+ partner universities' countries and acquire a new academic, professional and life experience and develop professional skills (https://www.llu.lv/en/erasmus). Erasmus+ mobility follows the procedure determined in the Erasmus University Charter and the Erasmus+ Student Charter. During the reporting period, four students of the master's degree programme after successful completion of their first semester applied for Erasmus mobility to study at Estonian University of Life Sciences, which was approved and provided for them by LLU International Cooperation Centre.

III - DESCRIPTION OF THE STUDY PROGRAMME (3. Resources and Provision of the Study Programme)

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. Whilst carrying out the assessment, it is possible to refer to the information provided for in the criteria set forth in Part II, Chapter 3, sub-paragraphs 3.1 to 3.3.

The resources (material and human resources) necessary for the implementation of the programme are available and sufficient. The academic staff members involved in the implementation of the programme are professional, their English language proficiency level corresponds to the requirements, they are capable of achieving high results not only in the quality of the study process but also in research activities, as evidenced by the number of publications and projects. The technical staff of ESAF is ready to work with foreign students, both from the EU Member States and the third countries. Available study infrastructure, information sources and facilities have been improved on yearly basis, students have an access to ESAF Information Centre of Studies and Research which contains the latest information sources, books, periodicals, also in English. The following LLU faculties are involved in the implementation of the programme: Faculty of Economics and Social Development, Faculty of Agriculture and Faculty of Food Technology, thus their good cooperation ensures the efficient use of the resources. To ensure the application of theories in practice, the practical works and laboratory works are conducted in the advanced production pilot laboratories and research laboratories of the Faculty of Food Technology. The milk processing laboratory with advanced equipment, such as a homogenizer, a cheese-making bath, an ice-cream

making machine, a double-walled boiler is intended to be used in the practical learning of technological processes for dairy products. A bowl cutter for meat chopping, a sausage filling equipment, a smokehouse, a meat maturation and cooling chamber in the meat and fish processing laboratory are intended for the basic technological processing. A vacuum evaporator, freezers and two screw extruder are used for practical learning of the processes of fruit and vegetable processing. Bread baking processes are learned by using a bread kneader, dough fermenters, a deck and rotation ovens to learn about bread production process. The latest technological equipment, i.e., sublimation boilers, spray boilers, an evaporation equipment, a high pressure sterilization equipment, an ultrafiltration equipment, can also be used to develop new products. Master students in the packaging laboratory learn by using the equipment that provides both vacuum and modified gas packaging possibilities in the food packaging process. To evaluate the quality of the products, master students use laboratories that can analyse basic quality parameters: moisture, water activity, dry matter content, fat, salt content, structural properties. A particular attention should be paid to the laboratory of sensory properties, where different colour shades are possible to provide for objective evaluation of products, for software processing of results and statistical analysis of data. There is a laboratory which is specially equipped with laminar boxing and incubators for growing and maintaining of micro-organisms for the analysis of microbiological indicators, a microscopy system for both morphological recognitions of microorganisms and evaluation of microstructure of products. Bioreactors and digestive tract simulators can be used for biotechnological research. It is important to note a wide range of possibilities for the evaluation of rheological properties and determination of nutrients and biologically active compounds in foodstuffs using spectrophotometric methods. Gas chromatography methods are intended for use in the analysis of specific flavours in foodstuffs. The material and technical provision of the Faculty of Food Technology ensures both basic processes and scientific research in food production and processing. A full description of equipment and facilities is available at https://www.llu.lv/lv/zinatniska-inventara-datubaze. The students of the programme also have an access to the university's infrastructure, which includes dormitories, the LLU Fundamental Library and premises for learning. The information about funding, methodological, information sources and facilities in more detail is available in subsections 2.3.1-2.3.3. of Section 2 of the self-assessment report.

The classrooms of the Lithuanian partner university are located in the Institute of Bioeconomy Development in the Faculty of Economics and Management of the Vytautas Magnus University (VMU). These rooms are fully adapted to the studies. All classrooms are provided with computers, visualization equipment, the internet connection, and work places supplied with computers for academic staff. Two classrooms are adapted for videoconferencing. At the moment of writing the report, 25 classrooms and 5 computer rooms were available for their implementation of the programme according to the schedule. The total space that could be used for studies is 2,328 m2. Students can use the reading room, the faculty's study room and computer classrooms for independent work. The academic staff have a work place in their offices, each with 2 – 4 places. They are equipped with computers with the internet connection with printers and other necessary office equipment. These rooms could be used for tutorials. During sessions time, each student has an opportunity to work with a computer. Modern software *Kontora, Statistica, SPSS, ArcGis, EpiINFO, HansaWorld* is available, and the number of computers is sufficient for all students of the faculty. The rooms and equipment is maintained by the personnel of the Department of the Computer Science. The number of computers and software are sufficient for the study programme's implementation to achieve the aim of the programme. In the reference period, the library stock contained 157,000 titles of books and 520,000 their copies. Each year the university subscribes to 18,000 scientific journals using 20 international data basis and their number has been increasing. The library also subscribes to 260 periodicals out of which one third is foreign periodicals. In

addition, the library offers an opportunity to read master theses and doctoral theses in electronic format and their abstracts in the Lithuanian databases ETD. Readers have an access to the Lithuania database *eLABA,* which includes full-text documents and various freely available foreign resources. Copies of the book and necessary scientific articles not available in the University libraries may be borrowed at the National Library of Lithuania, the Technical Library of Lithuania and other libraries through the inter-library exchange system. Since the VMU library is a participant of *AGLINET* students and academic staff have the exclusive opportunity to use the inter-library exchange system for free.

The study process at Estonian partner university, Estonian University of Life Sciences (EMU), is implemented at the premises of the Institute of Economics and Social Sciences, Kreutzwaldi 1, Tartu. There are 7 classrooms and 3 computer rooms with 66 computers in the Institute of Economics and Social Sciences. The academic staff and technical staff have their offices in the premises of the institute. There is the internet connection in all classrooms and offices. Students have access to rooms including free wireless internet access. Academic staff members have desktop computers or laptops. All classrooms are equipped with computers and projectors. The university library is located in the same building thus students can work individually and in groups. Students have an access to a sport club and there is a good bus connection with other parts of Tartu and Tallinn. The university library stock contained 297,245 items, including 297 245 books, annual subscribed magazines and newspapers – 11,564 and 230 respectively. The special literature for the implementation of the programme includes 3,441 books in Estonian, 917 books in English, there are 16 different data basis. There are 54 work places in the reading room of the library, 16 work places with a computer, 2 rooms for seminars as well as 2 rooms for individual work. E-catalogues are available to find publications from digital and print collections, there is a digital archive of theses. The access to electronic sources is provided by the university's network and off-campus via a secure *proxy* server. In addition, copying and scanning services are available.

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

III - DESCRIPTION OF THE STUDY PROGRAMME (4. Teaching Staff)

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

At the moment of writing the report, the total number of academic staff involved in the implementation of the study programme was 18, including eight academic staff members (45%) from LLU, four academic staff members (22%) from VMU, and six academic staff members (33%) from EMU. Overall, six professors, six associate professors, one assistant professor, three lecturers and two researchers are involved in the implementation of the programme. 78% of academic staff members have a PhD degree (*see Table 7.4.1. for more detailed information*). During the reference

period, all teaching staff of the programme were in the elected positions, which ensured the stability of academic staff.

4.2. 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 78% of the academic staff members have a PhD degree (in social sciences or engineering sciences) and two of the teaching staff members are studying in the doctoral study programme, the scientific qualification of the teaching staff of the study programme is capable of ensuring high quality of studies. Each university participating in the study programme employs highly qualified teaching staff in their respective areas to conduct the study courses and each university is responsible for the teaching of their study courses. The choice of academic staff members is based on their research work and / or practical performance in the field of study. The study course *"Operations and Supply-chain Management"* is taught by two LLU academic staff members: 1) an elected professor in the field of entrepreneurship and management, the doctor of economic sciences, who is the author of several study courses of management and 2) a researcher of the Institute of Agricultural Resources and Economics, who has many years of experience in leading a range of research activities in international projects of agri-food industries. The long academic experience of teaching in master's degree level programmes and practical experience in managing research projects ensure high quality of studies and modern application of theoretical knowledge in solving practical problems of agribusiness management.

The study course *"International Marketing in Agrifood Business"* is taught by an elected LLU professor who has specialized in marketing and an elected LLU associate professor in the field of agrarian economy. The professional qualification of the teaching staff is relevant to provide students with an in-depth understanding of the regularities of synergy that exists between marketing and agrarian economics as well as with professional skills in using international marketing tools according to the specifics of agribusiness products and services.

 The study course *"Finance Management"* is delivered by VMU professor, who is the author of several study courses and text-books related to financial management, and the study course *"Agricultural Economics and Policy"* is delivered by the elected researcher of EMU whose academic qualification and research activities focus on agriculture and rural development and modelling policy scenarios in Estonia.

In order to ensure the quality of the study process and the acquisition of professional skills and competences relevant to the programme, academic staff members from other faculties and institutes are also involved in the study process.

 The study course *"Innovation of Food System"* is delivered by an elected associate professor from LLU Faculty of Food Technology who not only conducts research but also cooperates with entrepreneurs in food innovation and transfer of technologies and knowledge. As regards the study course *"Integrated Marketing Communication in Agrifood Business"*, two teaching staff members are involved in the implementation of it. One of them is LLU professor, who has made a significant

contribution in application of theories of social sciences to research projects of various scale as well as has intensively worked at the Latvian Academy of Agricultural and Forestry Sciences, The Union of European Academies for Sciences applied to Agriculture, Food and Nature (UEAA), Swedish Royal Academy of Agricultural and Forestry Sciences. Her knowledge and experience promotes students' understanding of the capacity of Latvian and European science in solving rural development problems and transforming the space of the Baltic States' science according to the global trends. The second team member in the above mentioned study course is an associate professor who has a degree in agronomy, and she is a member of the European Association of Agricultural Economists, therefore she is familiar with the topics of agri-business and the practical aspects of communication. Details of the academic degrees, study courses and affiliation of the entire academic staff of the programme are available in Annex 5.1.

The academic staff members regularly develop their professional qualification. At least once in six years they attend professional development programme for university teaching staff "Innovations in Higher Education Didactics" (160 hours), where teaching staff learn about the latest topical information and knowledge and develop skills necessary for a modern, comfortable and flexible study process. In the reference period, four teaching staff members completed the programme and received the certificate. In addition, staff members regularly participate in annual LLU Academic Conferences. In 2018, the title of the conference was "Towards Accreditation of Study Directions/Programmes" and it was devoted to issues of the higher education accreditation process; but in 2019 the title of the conference was "I in the LLU Study Process", which was dedicated to the improvement of the study process in universities.

All of the academic staff members from Latvia, Lithuania, Estonia have acquired additional education in training courses related to the content of study courses, e.g., the training course "Hands-on Training on Baking Technology" at *European FooD-STA and ISEKI - Food Association for teaching food processing courses*; the training course "To acquire competences in work-based learning" at *Fondazione ITS - Istituto Technico Superiore Nuove Technologie per il Made in Italy* on developing practical competences in the study process; the training course "*Compliance of Latvian, Estonian and Finnish Rural Tourism Products with the Requirements of the Japanese Tourism Market*" organized by Latvian Rural Tourism Association and Estonian University of Life Sciences on the development of rural tourism; the training course "*Innovative Methods in Teaching Business*" arranged in the framework of the project "*Central Baltic Entrepreneurship Interaction CB Entreint*" on teaching entrepreneurship courses through innovative teaching methods, as well as in other training courses (*see CV of the academic staff*).

4.3. Information on the number of the scientific publications of the academic staff members, involved in the implementation of the 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 may be additionally specified (if applicable).

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).

4.5. Provide examples of the involvement of the academic staff in the scientific research and/or artistic creation activities both at national and at international level (in the fields related to the content of the study programme), as well as the use of the obtained information in the study process.

In the reference period, all teaching staff members were involved in different scale research projects. The academic staff of the study course "*Operations and Supply Chain Management*" participated in and/or were project leaders of large-scale international and national projects: *Future Oriented Collaborative Policy for Rural Areas and People - PoliRural"* of the *EU project "Horizon 2020"*, *CORE Organic Co-fund"*, *VPP SUSTINNO sub-project "Economic Competitiveness and Innovation in National Economy"* of the *EU project "Horizon 2020"* and *National Research Programme INTERFRAME project "Challenges and solutions for the state and society of Latvia in an international context"*. During the projects' implementation, the teaching staff of "Operations" and "Bioeconomy" modules had opportunities to extend their current research base with new findings as well as they could engage students in the research activities in relation to the development of the EU rural areas, the contribution of primary and secondary agricultural and food sectors to national economic development, identification of problems in increasing competitiveness of local companies thus strengthening students' problem solving and leadership skills.

The academic staff of the study course "*International Marketing of Agrifood Business*" participated as project managers and participants in the following international projects: *ERASMUS+ project "Education in Rural Entrepreneurship by Producing and Evaluating Medicinal and Aromatic Plants"*, *the project of the National Research Programme EKOSOC-LV, the sub-project No. 5.2.7.* " *"Involvement of the Society in Social Innovation Processes for Providing Sustainable Development of Latvia*", the *INTERREG Central Baltics project "Development of Meta-cluster to Attract Japanese Tourism Market – CAITO", the project of the Ministry of Agriculture "Forecasting Policy Scenarios by 2050", the project of the Ministry of Agriculture "Linking a marginal abatement cost curve (MACC) of Latvian Agriculture GHG emissions with carbon sequestration and its accumulation in arable land, permanent grasslands and wetlands"*. The involvement in the Erasmus+ and INTERREG projects enriched the teaching staff's experience in developing an international marketing strategy for specific agri-business products - medicinal and aromatic plants and rural tourism services to promote their products in international markets. Lecturers used the experience gained from the projects to add practical examples of marketing methods for agribusiness niche products in global markets. Furthermore, the agricultural development scenarios, GHG emissions and social innovation studies broadened the existing research base with the experience of different countries in agro-business collaboration and sustainable resource use in short supply chains, which were possible to use as practical examples for the clarification of theories in the modules of "Bioeconomy", "Operations" and "Strategies". It is intended to use project materials in the course work and case studies to enhance students' creativity and problem solving skills. The teaching staff member of the study course "*Integrated Marketing Communication in Agrifood Business*" participated in the projects *" Data Driven Dairy Decision For Farmers (4D4F)"* and the project *"ForestValue"* of the EU "Horizon 2020"*.

The work on both projects during the reference period was closely linked to the implementation of publicity measures of the project results for agricultural professionals and policymakers to raise awareness of the importance of innovation development in the European dairy and forestry sectors. It is envisaged to involve students in the organization and implementation of the surveys in the framework of the project, thus developing communication, collaboration and proactive approach skills. The project materials will be used as practical examples of marketing communication elements to raise students' awareness of how to reasonably explain and discuss complex agri-food business issues. A teaching staff member of the study course "*Innovation of Food System*" participated in the research project of the international *CI&DETS Research Centre and Viseu Polytechnic Institute (Portugal) "Psychosocial Motivations Related to Food Choices and Eating Practices"*. The project results gave a substantial contribution to the theoretical material of the study course with practical examples of systematically introducing innovations in food consumption by changing consumer eating habits, as well as the study courses of the Marketing and Bioeconomy modules with practical results of consumer behaviour research.

The same teaching staff member also participated as a researcher in the *COST Action CA18101 project "Biotechnology Network Towards Novel, Healthier and Sustainable Food and Bioprocesses"* (Association Sourdough), which will proceed until 2021; therefore, students will have the opportunity to participate in hands-on research, developing their information search and management skills as well as planning and organization skills of research activities. It is intended that this project will produce various new materials on food technology innovation to be used in lectures and practical work in the course "Food System Innovation".

4.6. 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 courses/ modules. Specify also the proportion of the number of the students and the teaching staff within the study programme (at the moment of the submission of the Self-Assessment Report).

The academic staff members of the study programme "Agri-food Business Management" in their universities ensure and implement the methodological work of the study process in cooperation with the methodological commission of master's degree studies of the respective faculty: develop and update programmes of study courses, organize supervision, the defence and approval of the topics of master theses, perform other activities related to the study process. In addition, a joint Programme Committee was established with the aim to provide, organize and supervise the study process, methodological work and the defence of master theses. The Programme Committee is also in charge of tutorials according to which each university ensures scheduling of tutorials during the time when students are writing their master theses. The programme directors of LLU Faculty of Economics and Social Development use modern IT software tools (*ASANA, Dropbox, Google Docs, Spreadsheet etc.*) in communication with each other and the administration of the faculty, which helps plan and direct the flow of work to ensure the study process.

The close co-operation, exchange of experience and knowledge among the members of the teaching staff involved in the programme facilitate the professional development of the lecturers and the networking of students on complex or systemic agribusiness, bioeconomy and agribusiness management issues thus fostering agribusiness and management science research and innovation development potential of all the three countries. As LLU, VMU and EMU are part of the BOVA university network, BOVA activities significantly contribute to strengthening collaboration between

partner universities and encourage the involvement of faculty members in developing joint BOVA courses. In addition, the network provides opportunities to enhance the knowledge of agricultural and food sciences, rural economics and other related sciences based on strong collaboration of international academic staff and to promote cooperation of BOVA network universities with partners beyond the borders of the Baltic States (http://bova-university.org/). Also, the academic staff members have an opportunity to visit partner universities in the framework of the staff mobility exchange or with the aim to deliver lectures. In the academic year of 2018-2019, four LLU academic staff members visited VMU and EMU in order to get acquainted with the colleagues from partner universities and study environment that in future will facilitate the mobility. In the reference period, the academic staff members involved in the programme collaborated with EMU and VMU staff members in the research activities related to agriculture and rural development, which resulted in six joint scientific articles published in scientific journals and proceedings of international conferences (see: CV of academic staff members).

In the reference period, the academic staff members involved in the programme collaborated with EMU in the implementation of the INTERREG Central Baltics project CAITO "Development of Meta-cluster to Attract Japanese Tourism Market" as a result of which a joint teaching material in Latvian and English languages was produced by LLU and EMU academic staff and researchers aimed at the target group of Latvian and Estonian rural tourism entrepreneurs to promote their networking and international competitiveness of rural tourism products in the Baltic States.

Table 7.4.1.

The number of students and academic staff at the moment of submission of the self-assessment report

Academic staff	Total	incl. LLU	incl. VMU	incl. EMU
Professor	6	2	3	1
Associate professor	6	5	1	0
Assistant professor	1	1	0	0
Lecturer	3	0	0	3
Researcher	2	0	0	2
Total number of academic staff	**18**	**8**	**4**	**6**
The number of enrolled students in the spring of 2018/2019 academic year	5	4	1	0
The number of enrolled students in the autumn of 2019/2020 academic year	15	1	0	14
Total number of students	**20**	**5**	**1**	**14**

Annexes

III. Description of the Study Programme - 1. Indicators Describing the Study Programme		
Compliance of the joint study programme with the provisions of the Law on Institutions of Higher Education (table)	12_annex.zip	12_pielikums.zip
Statistics on the students over the reporting period	Annex_13.docx	13.pielikums.docx
III. Description of the Study Programme - 2. The Content of Studies and Implementation Thereof		
Compliance of the study programme with the State Education Standard	Annex_14.docx	14.pielikums.docx
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard (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	Annex_17.docx	17.pielikums.docx
Curriculum of the study programme (for each type and form of the implementation of the study programme)	Annex_18.docx	18.pielikums.docx
Descriptions of the study courses/ modules	Description_of_the_study_courses.rar	Studiju_kursu_apraksti.rar
Description of the Study Direction - Other mandatory attachments		
Sample of the diploma to be issued for the acquisition of the study programme.	Master_diploma and supplement.rar	Magistra_diploms un pielikums.rar
Description of the Study Programme - Other mandatory attachments		
Document confirming that the higher education institution/ college will provide the students with the options to continue the acquisition of education in another study programme or at another higher education institution/ college (a contract with another accredited higher education institution/ college), in case the implementation of the study programme is discontinued	Agreement between LLU and RTU.docx	LLU_RTU_07012020_01000-4.1-e_2.edoc
Document confirming that the higher education institution/ college guarantees to the students a compensation for losses if the study programme is not accredited or the licence of the study programme is revoked due to the actions of the higher education institution/ college (actions or failure to act) and the student does not wish to continue the studies in another study programme	LLU confirmation_Agrifood.docx	LLU_apliecinajums_programmai_LPBV.edoc
Confirmation of the higher education institution/ college that the teaching staff members to be involved in the implementation of the study programme have at least B2-level knowledge of a related foreign language according to European language levels (see the levels under www.europass.lv), if the study programme or any part thereof is to be implemented in a foreign language.	LLU confirmation_Agrifood.docx	LLU_apliecinajums_programmai_LPBV.edoc
If the study programmes in the study direction subject to the assessment are doctoral study programmes, a confirmation that at least five teaching staff members with doctoral degree are among the academic staff of a doctoral study programme, at least three of which are experts approved by the Latvian Science Council in the respective field or sub-field of science, in which the study programme has intended to award a scientific degree.		
If academic study programmes are implemented within the study direction, a document confirming that the academic staff of the academic study programme complies with the provisions set out in Section 55, Paragraph one, Clause three of the Law on Institutions of Higher Education	LLU confirmation_Agrifood.docx	LLU_apliecinajums_programmai_LPBV.edoc
Sample (or samples) of the study agreement	Studiju_ligums_paraugs_EN.pdf	Studiju_ligums_paraugs_LV.pdf
If academic study programmes for less than 250 full-time students are implemented within the study direction, the opinion of the Council for Higher Education shall be attached in compliance with Section 55, Paragraph two of the Law on Institutions of Higher Education.	Council of Higher Education_conclusion_Agrifood.docx	Lauksaimniecības un pārtikas biznesa vadīšana_maģistra.pdf