

Liepaja University Development Strategy for 2016–2020

Summary

Liepaja University (LiepU) Development Strategy for 2016-2020 is a medium-term planning document, the necessity of which is determined by demographic and economic factors and the priorities set out in the higher education policy of EU and Latvia and reflected in the requirements stated in the normative documents for higher education, science and innovations, as well as in the financing model for higher education.

The strategy is based on the vision of the future, which is grounded in the assessment of the current situation and priorities listed in the international, national, regional and local planning documents.

Elaborating the Strategy, the current Latvian and EU planning and policy documents, topical in 2016, are taken into account, including RI3 requirements of Latvian Smart Specialization Strategy, as well as Latvian normative acts.

The Strategy highlights three priority directions of development: studies and lifelong learning, scientific work and the development of innovations and management (management of human resources, projects, finances, infrastructure, information).

A situation analysis is carried out about each of directions of development, defining development goals and priority activities, performance indicators, their initial (2016) and target (2020) values. In accordance with the chosen objectives, a study programme development plan has been developed for reaching the performance indicators in year 2020.

Future vision of Liepaja University

Liepaja University is the centre of higher education, science and culture of Kurzeme region, which contributes to the development of the region both in Latvian and international contexts.

The mission

To be a promoter of education, science, innovations and cultural development in Liepaja and Kurzeme, which provides studies that are competitive and necessary for the development of the region, as well as nationally and internationally important studies, and implements study-related, nationally and internationally recognized research and contributes to the sustainable development of the society.

Values

Human being. Cooperation. Growth. Latvia.

The ultimate goal

To provide research-based, needed for the region, nationally and internationally competitive and top-quality higher professional, academic and lifelong educational opportunities, promoting the development of the national economy that is based on knowledge and professional competences, and strengthening a creative, culture-oriented society.

Studies and lifelong learning

Taking into account the results of external environment (demography, migration and re-emigration, economy, fiscal situation, labour market forecasts, offers of other universities

in Kurzeme region, etc.) and internal environment (LiepU human resources, infrastructure, experience, strengths, etc.) analysis, four basic LiepU specialization directions are determined, in which a full cycle of studies is provided (bachelor's, master's and doctoral studies). Key words for the study directions are **education and social well-being; art; language and culture studies; technologies, including information technologies, engineering technologies and eco-technologies**. The latter directly corresponds to the nationally determined priorities - STEM (science, technology, engineering, mathematics and information technology). In the context of future innovations, art and design (STEM + Art = STEAM) are also integrated in the STEM fields, which is in line with LiepU specialization direction in the field of art.

The strategic framework of the development of study programmes is formed by 3 groups of study programmes. Firstly, these are STEM study programmes (IT, environmental sciences, design and new media art) with a unique specialization and active networking with other regional educational institutions (Liepaja State Technical College, Riga Technical College, Liepaja Maritime College, RTU Branch, etc.). Secondly, these are study programmes with long-term implementation experience, assured quality and a stable demand for educated specialists in the labour market (education science, speech therapy, social work, art, languages and culture). Thirdly, these are professional study programmes supporting the development of Kurzeme region with specialization combinations, which allow responding flexibly to the demand of the labour market (management and entrepreneurship, tourism and culture management).

In the academic year 2015/2016, there are 35 study programmes implemented in 10 study directions (see Annex 1). In the last years, 5 new professional study programmes have been licensed. The study work is organized by 4 faculties - the Faculty of Pedagogy and Social Work, Faculty of Humanities and Arts, Faculty of Management and Social Sciences and Faculty of Natural and Engineering Sciences.

The development of study programmes takes place in 4 directions: expansion of the qualification spectrum within the framework of one study programme; establishment of joint study programmes with other Latvian and foreign higher education institutions; extension of the possibilities to learn in distance learning programmes, which enables to obtain education and qualification for those living or working abroad; and creation of new study programmes.

The necessary activities for development of the study programmes offered in English are reflected in Table 9, while activities for increasing the number of foreign students and for development of an international study environment, incl. the attraction of foreign teaching staff, are included in LiepU Internationalization Plan for 2016-2020.

The **Internationalization Plan** of LiepU states the tasks for internationalization of the university related to implementation of international study programs, attraction and selection of foreign students, implementation of international mobility, ensuring the sustainability of international cooperation and the improvement of the international study environment. Internationalization ensures that the development of LiepU study programmes and the academic processes are in accordance with the quality criteria adopted in international practice, it provides lecturers with the opportunity to expand international cooperation by engaging in international study and science projects or programmes, and helps to attract foreign lecturers.

The priority of lifelong learning is elaboration and development of non-formal education programmes in the study directions implemented by the university for those who have already acquired secondary education. The following three basic activities are used to raise the employment rate of young people and adults:

- development and implementation of professional perfection/ professional competence/ professional qualification improvement programmes,
- participation in projects and open tendering procedures;
- development and implementation of the annual lecture cycle “Small Academy” that is open for public.

Taking into account the decrease of the population in Latvia, Kurzeme and Liepaja, **the main tasks for studies and lifelong learning** are: consolidation of study directions and programmes in accordance with university’s status and specialization areas, maintaining the number of students, limiting the academic groups with just a few students, attracting students who pay for their studies, promoting interest in the areas of STEM, increasing the proportion of full-time foreign students, diversifying the offers for lifelong learning.

Scientific activities and innovations

LiepU ensures **research-based studies** – research topics are related to the study directions of LiepU (see Annex 2), which are in line with the Guidelines for the Development of Science, Technology and Innovation for 2014-2020 and the Smart Specialization Strategy contained therein, as well as with national priority research areas, including Letonica. The research topics of LiepU Management Science contribute to the development of Liepaja and the region as a logistics centre, and for creating and sustaining the environment favourable for small and medium-sized businesses, as well as for tourism and creative industries.

The link between the research and studies is ensured by students' participation in LiepU scientific and applied research projects; annual competition of LiepU students' research projects; students' scientific conferences and readings of scientific papers; edition "Liepaja University Students' Scientific Papers"; the activities of the foundation "Liepaja University Science and Innovation Park" for obtaining additional funding for support of students' research and practice.

There are **4 Scientific Institutes** that operate as LiepU structural units: Institute of Natural Sciences and Innovative Technologies, Institute of Educational Sciences, Kurzeme Humanitarian Institute, Institute of Management Sciences.

In order to ensure the sustainability of LiepU as a scientific institution, **the growth and stability of intellectual resources** (number of researchers, sustainable employment) must be achieved, which implies the achieving of internationally recognized results, the ability to attract funding for research and participate in internationally funded projects. The sustainability of intellectual resources is related to the work of LiepU doctoral programmes and expansion of cooperation between research structural units at both national and international levels. In the fields in which LiepU does not have its own doctoral programme, the proportion of scientifically qualified academic staff increases with the use of doctoral programmes at other Latvian universities (LU, LLU, RTU) or by selecting and electing candidates who have worked elsewhere in open academic tenders.

In LiepU there are accredited doctoral study programmes in 4 study directions, 2 of which are implemented in cooperation with another Latvian higher education institution. Doctoral study programme "E-learning Technologies and Management" is developed as an inter-university programme between LiepU and RTU, using the strengths of the partners: LiepU – Pedagogy and Management science (education management, public management), RTU - Information technologies and Management science. LiepU doctoral programme in the sphere of Linguistics has developed from a doctoral programme with a specialization only in Latvian linguistics to a joint doctoral programme of two Kurzeme HEI with a wider offer of linguistic spheres and the possibility to conduct research not only in Latvian linguistics, but also in applied and contrastive linguistics. Cooperation with LU doctoral programme takes place in joint doctoral research seminars and conferences.

The “New Media Art” doctoral programme is based on the research of art practice. Until 2020, the development of the programme envisages the establishment of a joint doctoral programme (together with at least one other higher education institution of Latvia) and closer cooperation with the doctoral programmes of the field abroad, such as Aalto University in Finland. The doctoral programme “Pedagogy” collaborates with doctoral programmes of the field in Latvia (Latvia University and Rezekne Academy of Technologies) and also abroad.

The number of LiepU **scientific publications** (taking into account the number of academic staff and their workloads) shows that on average, each academic staff member publish at least 1 scientific article per year, but the number of publications included in the *Web of Science* and *Scopus* databases each year forms a small but increasing share in the total number of publications. The increase of publications in *Web of Science*, *Scopus*, as well as industry-recognized databases and open-access journals by the year 2020 will be ensured by: indexing of LiepU continuing publications in databases; development of joint publications with Latvian and foreign scientific cooperation partners as well as social partners, including entrepreneurs, and by utilizing LiepU Scientific Activity Development funds and Faculties Development Funds for publications in *Web of Science* and *Scopus*, as well as open-access journals.

For promotion of research and business cooperation by 2020, a Technology Transfer Centre will be established, and LiepU Prototyping Laboratory will be in operation. The implementation of research results in national economy and commercialization will take place in cooperation with the Business incubators of Kurzeme.

The promotion of science and research takes place in cooperation with all social partners, all age and social groups, particularly developing cooperation with schools, creative and professional organizations, promoting the interest of young people in science and their understanding of scientific activity and creativity as a foundation for a successful career in any field of activity. By the year 2020, young scientists' schools will be developed in all major fields of study and research; ensuring the organization of annual competitions and Olympiads for pupils in cooperation with the subject teacher associations and social partners; LiepU will act as a methodological support centre for researchers in the Region of Kurzeme, in cooperation with the National Centre for Education (NCE), implementing operation 1.2. "Organization of Regional Scientific Conferences" of the ESF project "Implementation of National and International Measures for the Development of Pupils' Talents".

Management development

The aim of management development is to ensure effective cooperation between the structural units, to promote the attraction and efficient use of all kinds of resources (people, infrastructure, information), to increase the efficiency of the use of financial and material-technical resources, and to promote the efficiency of the general staff.

LiepU has a certified Quality Management System (QMS) in accordance with ISO 9001: 2008. Support processes of this system include basic budget planning, project development and monitoring, academic and general staff assessment, etc. Within the QMS, the goals and measurements of processes are regularly determined, and the results are assessed, which are reflected in management reports. Existing QMS integrates the measurements that are important for ensuring the achievement of the development goals of LiepU.

In the end of 2016, the current QMS certification period expires, so it is important to assess the usefulness of the current system, the possibilities for integrating in it the quality indicators of higher education and the need for re-certification; and the compliance of other quality management systems with the strategic objectives of LiepU and their usefulness.

The priority activity management spheres that directly support the strategic objectives of LiepU are the following: management of human resources, management of infrastructure, project management and financial management. The objectives and tasks of other management areas (information, education quality management, etc.), which are equally important for achieving the strategic goals, are reflected in the short-term planning documents.

The basic text of the Strategy is supplemented by 9 annexes, some of which are directly related to the Operational Programme "Growth and Employment" SO 8.1.1. "Increase the number of STEM study programmes, including medicine and creative industries" (description and justification of choice for STEM programmes selected for modernization, etc.).

Number of students at Liepaja University in the academic year 2015/2016² /01.10.2015./

Study direction	Study programme	Basic studies			Highest level studies		
		Full time	Part time	Together	Full time	Part time	Together
Education, pedagogy and sports	42141 <u>Speech Therapy</u>	47	-	47			
	42141 <u>Teacher</u>	206	141	347			
		253	141	394			
	47141 <u>General Secondary Education Teacher</u>				84	-	84
	45142 <u>Master of Education Sciences in Pedagogy¹</u>				9	-	9
	47142 <u>Career Counsellor</u>				16	-	16
	51142 <u>Pedagogy</u>				6	-	6
				115	-	115	
Art	42214 <u>Design</u>	72	-	72			
	42211 <u>Fotoart¹</u>	16	-	16			
	43213 <u>New Media Art</u>	40	-	40			
		128	-	128			
	45213 <u>New Media Art</u>				9	-	9
	47211 <u>Art</u>				6	-	6
	51213 <u>New Media Art</u>				5	-	5
				20	-	20	
Language and Culture studies, Mother Tongue studies and Language programmes	43222 <u>European Language and Culture Studies (3 years)</u>	37	-	37			
	43222 <u>European Language and Culture Studies (4 years)</u>	29	-	29			
	43222 <u>Baltic Philology, Culture and Communication</u>	23	-	23			
		89	-	89			
	45223 <u>Latvian Filology¹</u>				4	-	4
	45222 <u>Writing Studies</u>				25	-	25
	51222 (5947) <u>Linguistics (Latvian Diachronic and Synchronous Linguistics, Applied Linguistics and Comparative and Contextual Linguistics)</u>				5	-	5
				34	-	34	
Management, administration and real estate management	42345 <u>Business and Organization Management</u>	57	75	132			
	42345 <u>Communication Management¹</u>	53	-	53			
	42345 <u>Culture Management</u>	23	20	43			

		133	95	228			
	47345 <u>Management Sciences</u>				19	5	24
Physics, Material Science, Mathematics and Statistics	42460 <u>Mathematics, Physics and Computer Sciences</u>	10	-	10			
	43460 <u>Mathematics¹</u>	6	-	6			
	43440 <u>Physics¹</u>	-	-	-			
		16	-	16			
Information Technology, Hardware, Electronics, Telecommuni- cations, Computer Management and Computer Science	42523 <u>Mechatronics</u>	15	-	15			
	42481 <u>Information Technology</u>	73	-	73			
	42481 <u>Information Technology (English)</u>	6	-	6			
	43481 <u>Computer Sciences¹</u>	11	-	11			
	43481 <u>Computer Sciences (English)</u>	-	-	-			
		105	-	105			
	47481 <u>Information Technology (2,5 y)</u>				23	-	23
	47481 <u>Information Technology (English) (2,5 y)</u>				1	-	1
	47481 <u>Information Technology (3 y)</u>				2	-	2
	51481 <u>E-learning Technologies and Management</u>				12	-	12
				38	-	38	
Health Care	47722 <u>Music Therapy</u>				-	15	15
Social Welfare	42764 <u>Social Worker</u>	51	61	112			
	47762 <u>Social Work</u>				14	-	14
Hotel and Restaurant Service, Tourism and Recreation Organization	42812 <u>Tourism Management and Recreation</u>	54	-	54			

<i>Environment Protection</i>	42850 Environmental and Renewable Energy Management and Engineering	44	-	44			
	47850 Eco-technologies				11	-	11

Together 1441 873 297 1170 251 20 271

¹ study programmes, in which currently students are not admitted (Computer Sciences and Physics are offered in English)

² The students were admitted to the distance learning professional bachelor study programme "Primary and Basic Education Subject Teacher" for the first time in Winter, 2016.

LiepU research topics and related study directions

Research topics	Study directions
<ul style="list-style-type: none"> • <i>Development and use of E-resources and information technologies for the development of the national economy</i> • <i>Nonlinear problem solutions in mathematical physics and applied mathematics and the development of high performance algorithms in parallel processing technologies</i> • <i>The use of smart, nanomaterial and renewable energy resources in energetics</i> 	<p>Information Technology, Hardware, Electrical engineering, Telecommunications, Computer management and Computer science</p> <p>Physics, Material Science, Mathematics and Statistics</p>
<ul style="list-style-type: none"> • <i>Didactics of Natural sciences, Mathematics and Information Technologies</i> 	Physics, Material Science, Mathematics and Statistics
<ul style="list-style-type: none"> • <i>The application of Eco-technology (eco-engineering) approaches for the sustainable use of environmental services and artificial ecosystems</i> <ul style="list-style-type: none"> – Use of bio-indication method for assessing the impact of climate change in the urban environment – Life Sciences: Life Cycle Thinking and Behavioural Studies and Education – Circular Economy: exploration of cycle thinking and behaviour and education 	Environment protection
<ul style="list-style-type: none"> • <i>Language, literature, culture in the Kurzeme cultural space in the context of the culture of Latvia, the Baltics and Northern Europe</i> <ul style="list-style-type: none"> – History of Kurzeme literature, personalities and creativity processes – Topical directions of the Baltic literature – Liepaja Theatre in the context of the history and modern processes of the Baltic Theatre – Ethnolinguistic contacts of the Latvian dialects on the Eastern coast of the Baltic Sea • <i>Functioning and learning of modern languages and literature in a multicultural environment</i> 	<p>Language and Culture studies, Native language studies and language programmes</p> <p>Arts</p>
<ul style="list-style-type: none"> • <i>Interdisciplinary practices of art and science in the digital age</i> <ul style="list-style-type: none"> – Network culture and sustainability – Social media and networked communities – Cultural heritage as a resource in art – Design and design studios for improving the quality of life of society 	Arts
<ul style="list-style-type: none"> • <i>The dimensions of educational quality in the knowledge society</i> <ul style="list-style-type: none"> – Theoretical and practical aspects of competence-based approach in education 	Education, pedagogy and sport

<ul style="list-style-type: none"> – The phenomenon of values in the personality development – The importance of art education in the formation of personal identity – Interdisciplinary study of teachers' identity – Pedagogical aspects of diversity for improving the quality of the study process • Education <i>based in cooperative culture</i> 	
<ul style="list-style-type: none"> • <i>Innovative economy in Kurzeme region</i> – The role of business incubators in the regions – The potential of regional economy at national and international level in terms of labour market migration, business development, quality of vocational education and promotion of entrepreneurship among young people – Development of innovative and creative culture tourism – Health tourism in the Baltic Sea region: innovations, development, management • <i>The local, national and sustainable context of social entrepreneurship</i> 	Management, administration and Real Estate Management
<ul style="list-style-type: none"> • <i>Challenges in social work and social work education</i> 	Social Welfare
<ul style="list-style-type: none"> • <i>The study of voice's normal functions and disorders of individuals of different age and in various cases of illnesses</i> – The long-term effects of sound amplification systems on reducing the voice load for teachers and improving the understanding of verbal instructions for pupils • <i>Exploration of the integrativity process in music therapy from an interdisciplinary viewpoint</i> 	Health Care