

Land Use Planning

The aim of the Programme is to prepare broad erudition and highly qualified land use planning specialists who are able to sustainably solve multiple theoretical and practical problems of environmental engineering, landscaping and land administration, improve their professional activities, have critical, systematic and creative thinking and research (scientific) work experience in professional real estate administration, planning, etc. work or developing innovative and science-based real estate technology and management solutions.

Description of learning outcomes of each study cycle	Intended learning outcomes of the Programme	Study courses of the Programme
Knowledge and its application	- To understand the principles of environmental engineering and be able to apply them when solving new engineering tasks that are directly related to landscaping, land administration and real estate formation.	Rural Landscape Management, Real estate Valuation and Market Analysis, Management of Protected Areas Landscape, Land Resources Information System, Geographic Databases, Rural Development and Land Consolidation, Urban Planning, Research Work-1, Agroenviromental Assessment, Management of Investment Projects, Landscape Architecture, Landscape Ecology, Master studies final work, Legal Regulation of Constructions, Evaluation of Planning Solutions.
	- To be able to perform engineering analysis by remote, contact, mathematical statistical and other methods, and to critically evaluate the latest achievements in the field of environmental engineering, to solve various problems of environmental engineering. Have the knowledge and skills required to perform design work in environmental engineering, measurement engineering and landscaping.	Analysis of Land Administration, Research Work-1, Digital Photogrammetry, Regulationof Land Use Planning, Spatial Data Analysis, Legal Regulation of Constructions, Automation of Geodetic Works.
Research skills	- To be able to identify, find, evaluate the data required for engineering work, landscaping and land administration using databases and other information sources.	Management of Protected Areas Landscape, Land Resources Information System, Geographic Databases, Urban Planning, Master studies final work, Spatial Data Analysis, Research Work - 2.
	-To be able to plan and perform analytical, modelling and experimental research in the field of environmental engineering, critically evaluate their data and present conclusions.	Rural Landscape Management, Real Estate Valuation and Market Analysis, Land Resources Information System, Analysis of Land Administration, Rural Development and Land Consolidation, Digital Photogrammetry, Regulation of Land Use Planning, Spatial Data Analysis.

	-To be able to investigate the applicability of new methods and techniques for solving environmental engineering, landscaping and land administration problems for sustainable land use, theory planning and efficient land administration.	Rural Development and Land Consolidation, Research Work -1, Legal Regulation of Constructions.
Special abilities	-To be able to combine the knowledge of different fields of study in solving multiple problems of environmental engineering, landscaping and land administration, using modern technologies that conserve land and other natural resources.	Methodology of Scientific Research, Landscape Ecology, Digital Photogrammetry, Master studies final work, Research Work -2, Automation of Geodetic Works.
	-To comprehensively understand and be able to apply methods and methodologies in accordance with ethical, environmental and commercial engineering requirements.	Agroenviromental Assessment, Landscape Architecture, Digital Photogrammetry, Evaluation of Planning Solutions.
Social abilities	- To be able to work effectively in solving environmental engineering issues, independently and in a team, to be able to be the leader of a team that can be formed by representatives of various fields of study and levels.	Spatial Data Analysis. <i>According to the specifics of the courses, includes other study courses</i>
Personal abilities	-To be able to communicate, coordinate and solve land administration and management issues with the engineering community and the general public at the national and international levels.	Digital Photogrammetry. <i>According to the specifics of the courses, includes other study courses.</i>
	-Holistic understanding of the impact of environmental engineering and related land use planning solutions on society and the environment, adherence to professional ethics and engineering standards, knowledge of project management and business aspects, understanding of responsibility for engineering activities and the importance of individual lifelong learning.	Agroenviromental Assessment, Management of Investment Projects, Evaluation of Planning Solutions. <i>According to the specifics of the courses, includes other study courses.</i>

I semester	Study courses	ECTS	Contact work hours	Independent work hours	The form of assessment
	<i>Study field courses</i>				
	Rural Landscape Management	6	60	100	Exam in written
	Management of Protected Areas Landscape	6	60	100	Exam in written
	Land Resources Information System	6	60	100	Exam in written
	Real Estate Valuation and Market Analysis	6	60	100	Exam in written
	<i>Study courses of another study field(-s)</i>				

	Methodology of Scientific Research	6	60	100	Exam in written
	Totally in the semester:	30	300	500	
II semester	Study courses	ECTS	Contact work hours	Independent work hours	The form of assessment
	<i>Study field courses</i>				
	Geographic Databases	6	60	100	Exam in written
	Rural Development and Land Consolidation	6	60	100	Exam in written
	Urban Planning	6	60	100	Exam in written
	Research Work - 1	6	3	157	Exam in written
	Analysis of Land Administration	6	60	100	Exam in written
	Totally in the semester:	30	243	557	
	Study courses	ECTS	Contact work hours	Independent work hours	The form of assessment
	<i>Study field courses</i>				
III semester	<i>Compulsory:</i>				
	Research Work -2	6	3	157	Exam in written
	Spatial Data Analysis	6	60	100	Exam in written
	Agroenvironmental Assessment	6	60	100	Exam in written
	<i>Elective: (6 ECTS):</i>				
	Landscape Architecture	6	60	100	Exam in written
	Landscape Ecology	6	60	100	Exam in written
	Evaluation of Planning Solutions	6	60	100	Exam in written
	Regulation of Land Use Planning	6	60	100	Exam in written
	<i>Study courses of another study field(-s)</i>				
	<i>Elective: (6 ECTS):</i>				
	Management of Investment Projects	6	60	100	Exam in written
	Legal Regulation of Constructions	6	60	100	Exam in written
	Automation of Geodetic Works	6	60	100	Exam in written
	Digital Photogrammetry	6	60	100	Exam in written
	Totally in the semester:	30	243	557	
IV se	Study courses	ECTS	Contact work hours	Independent work hours	The form of assessment

	Study field courses				
	Master studies final work	30	15	785	Defence of the final work
	Totally in the semester:	30	15	785	
	Totally in the programme:	120			
	Totally for the final thesis:	30			
	Totally for elective courses:	12			
	Totally for the study field courses:	102			
	Totally for the study courses of another study field:	18			

Faculty of Engineering
Group of Fields of Study Engineering Sciences
Lenght of the Programme 2 years
ECTS credits 120
Name of the Qualification Master of Engineering Sciences

Contacts

Faculty of Engineering
Contact person of the Programme: AssocProf. Virginija Gurskienė, virginija.gurskiene@vdu.lt
Address: Studentu str. 15, Akademija, LT-53362 Kaunas distr., Lithuania
Website: <https://zua.vdu.lt/en/faculties/faculty-of-agricultural-engineering/>