

STUDY PROGRAMME DATA

No	Parameters	Data
1.	Name of a study programme	Digital Geodesy
2.	Qualification to be awarded, code	Professional Bachelor of Engineering Sciences, KVALLAIP00811
3.	Institution that has performed accreditation, accreditation term	Centre for Quality Assessment in Higher Education
4.	Accreditation order, term	2016-08-24, Nr. SV 6-38, 2022-06-30
5.	Place of delivery of a study programme	Klaipeda State University of Applied Science, code 111968056, www.kvk.lt
6.	Summary of Profile of a Study Programme	<p>General Description:</p> <p><i>Objective(s) of a study programme:</i></p> <p>The aim of Professional Bachelor study of Digital Geodesy programme is to prepare highly qualified geodesy specialist. They will be able to use of modern geodetic devices, GPNS equipment, stationary 3D scanners and drones with equipment of remote sensing technology. Specialists will be able to use 3D geoinformation (GIS) technology to create 3D surface models with LIDAR; they will be able to use other methods of measured area data, performing cadastral measurements of structures and land plots, preparing topographic and geodetic plans for underground engineering networks.</p> <p><i>Learning outcomes:</i></p> <p>The graduate of Digital Geodesy programme will be able to:</p> <ol style="list-style-type: none"> 1. Adapt traditional and innovative measurements engineering techniques and use methods for design & development, combining cost, benefit, safety of humans, quality and reliability. 2. Apply knowledge of new technologies and solve geodetic, cartographic, spatial information infrastructure and territorial planning challenges. 3. Use methods of mathematical statistical data processing, measurement reliability and uncertainty determination methods, as well as be able to collect, analyze and systematize data. 4. Use measurement information for engineering research and other applied research, design different types of engineering maps and create information data sets. 5. Conduct practical research, planning and designing experiments, starting with problem formulation, selection of research equipment, and evaluation and qualification of results. 6. Make measurements with modern measuring devices, to analyze the results of real estate administration, formation, evaluation methods, that meet Lithuanian and EU standards and regulations.

		<p>7. Apply measurements software to solve engineering problems, obtain and process data solutions, produce computer graphics and perform digital projects.</p> <p>8. Work independently as well as in a team, with a holistic understanding of the impact of engineering decisions on society and the environment, and in compliance with professional ethics and engineering standards.</p> <p>9. Find out the interfaces of measurement solutions with their economic consequences, to understand the importance of individual lifelong learning and to prepare for it, to be able to communicate with the engineering community and the general public.</p> <p><i>Activities of teaching and learning:</i></p> <p>The Digital Geodesy study programme is oriented to the development of generic and specialist competences and creativity: lectures, seminars, discussions, individual and group projects, practice, case studies, public presentation and defense of projects, mind-maps, problem - solving reading, writing articles, information search and systematizing, etc.</p> <p><i>Methods of student achievement assessment:</i></p> <p>The assessment of the learning outcomes of the study programme is carried out during the semester and the examination session applying a cumulative assessment system. During the semester, the learning outcomes are assessed by means of interim assignments: tests, individual and group projects, case studies, information search and systematizing, discussions, essays, independent creative tasks, seminars, term papers, practice reports, examinations, final projects and / or qualifying exams.</p> <p><i>Framework:</i></p> <p><i>Study subjects (modules), practical training:</i></p> <p>Study subjects (127 credits): Professional Communication, Foreign Language (English, Russian), Applied Research Methodology, Basics of Management, Engineering Graphics, Geoinformatic, Computer-Aided Design Systems, Basics of Geodesy, Remote Sensing Technologies, Spatial Planning, Geodetic Instruments and Automation of Measurements, Cadastral Measurements, Cartography, Processing of Metrological and Geodetic Measurements, Digital maps, Photogrammetry, Business Economics.</p> <p>Optional subjects (6 credits).</p> <p>Practices (35 credits): Topography, Preparation of Geodetic Plans, Engineering Geodetic Research, Specialisation Practical Training (Applied Geodesy)</p>
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	<p>or Geoinformation Systems), Final Professional Practical Training of Geodesy. Graduation Paper (12 credits).</p>
	<p><i>Specializations:</i></p>
	<p>Geo-information Systems. Applied Geodesy.</p>
	<p><i>Optional courses:</i></p>
	<p>It is possible: - to select optional subjects; - to select alternative subjects.</p>
	<p><i>Distinctive features of a study programme:</i></p>
	<p>Measurements are carried out using modern geodetic instruments, GPNS equipment using stationary 3D scanners and unmanned aerial vehicles (drones). 3D surface models are developed using 3D technology with collected data from LIDAR and with other methods measured areas. Cadastral measurements of buildings and land plots are being carried out, topographic and engineering digital geodetic plans are being prepared.</p>
	<p><i>Access to professional activity or further study:</i></p>
	<p><i>Access to professional activity:</i></p>
	<p>Possibilities to make a career in institutions for digital geodesy measuring, companies for real estate cadastre data processing and evaluation, construction organizations, municipalities or other institutions for spatial data processing, storage and geomatics (GIS) departments and centers, to create private companies.</p>
	<p><i>Access to further study:</i></p>
	<p>Access to the second cycle studies upon meeting requirements set by the accepting higher education institution.</p>

Name of institution: Klaipeda State University of Applied Sciences

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Data updated: 2021-02-23