

COURSE CATALOG - Geodesy and Geomatics

Type of Study: Undergraduate university study

Semesters: 6

ECTS: 180

	Code	Course	Student workload (L + S + T)	ECTS credits
1st semester (Winter)	229232	Instruments and sensors in Geodesy and Geomatics	15 15 15	5.0
	229381	Application of communication skills	30 15 0	3.0
	229233	Mathematics I	45 0 45	6.0
	229234	Basics of Geoinformatics	30 0 15	5.0
	229235	Foreign Language I - English	15 0 15	2.0
	229236	Introduction to Geodesy <u>and</u> Geomatics	30 0 30	6.0
	229384	Environmental Protection	30 15 0	3.0
2nd semester (Summer)	229237	Ethics and space	30 0 15	2.0
	229238	Geodetic Reference Frame	30 0 30	6.0
	229239	Geospatial data and geoinformation	30 15 15	5.0
	229386	Geotechnical engineering	15 30 0	4.0
	229240	Mathematics II	45 0 45	6.0
	229241	Measurement and calculation methods in Geodesy and Geomatics	30 0 15	5.0
	229242	Foreign Language II - English	15 0 15	2.0
3rd semester (Winter)		Analysis and processing of geodetic and geomatic measurements	30 0 15	5.0
		Photogrammetry	15 15 15	4.0
		Geoinformation Systems	30 15 15	6.0
		<u>Information</u> security and data protection	15 15 0	3.0
		Cadastré	30 0 30	6.0
		Modelling of open watercourses	30 15 15	4.0
		Land /Real estate registration system	15 15 0	2.0
4th semester (Summer)		Databases	30 0 15	4.0
		Remote sensing and satellite missions	30 15 15	5.0
		Engineering geodesy	30 15 15	5.0
		Integrated Navigation Systems and sensors	30 0 30	6.0
		Professional practice	0 0 100	4.0
		<i>Reports and studies for environmental protection and nature conservation</i>	15 15 0	3.0
		<i>Hydraulics</i>	15 0 15	3.0
		<i>Construction Monitoring and Building Condition Assessment</i>	15 15 0	3.0
		<i>Quality management</i>	15 0 15	3.0
5th semester (Winter)		Selected chapters of Physical geodesy	30 0 15	5.0
		Applied Geomatics	30 15 15	6.0
		Civil Infrastructure Design	30 0 15	5.0
		Space visualization	15 15 15	4.0
		Real Estate Value	30 0 15	4.0
		Application of geomatic techniques in traffic route design	15 0 15	3.0
		<i>Traffic Routes Design</i>	15 15 0	3.0
		<i>Spatial Planning</i>	15 15 0	3.0
6th semester (Summer)		Geo-Information Infrastructure	30 15 15	5.0
		Project assignment	0 30 15	5.0
		WEB GIS	30 15 15	5.0
		Graduation thesis		10.0

L - LECTURES, S - SEMINARS, T - TUTORIALS

Elective courses in italic