

COURSE CATALOGUE 2016-2017

Field: **Geodetic Engineering**

Programme: **Bachelor's Degree Programme in Land Surveying and Cadastre**

Length of studies: **4 years (8 semesters)**,

Total number of ECTS credits: **240 + 30 for the B.Sc. Thesis**

Languages of teaching: **Romanian (English/French available for Erasmus students)**

Form of education: **Full-time**

Course Code	Course Title	Type of course/ tuition hours	Semester	ECTS
IG1101	Mathematical Analysis	Compulsory, 42	Autumn	4
IG1102	Linear Algebra, Analytical and Differential Geometry	Compulsory, 42	Autumn	3
IG1103	Descriptive Geometry	Compulsory, 56	Autumn	4
IG1104	Physics	Compulsory, 42	Autumn	3
IG1105	Topography 1	Compulsory, 56	Autumn	5
IG1106	Chemistry	Compulsory, 42	Autumn	4
IG1107	Special Mathematics I	Compulsory, 42	Autumn	4
IG1108	Foreign Language 1	Compulsory, 28	Autumn	2
IG1109	Sport 1	Compulsory, 14	Autumn	1
IG1201	Special Mathematics II	Compulsory, 42	Summer	3
IG1202	Geodetic Instruments and Land Surveying Methods	Compulsory, 56	Summer	4
IG1203	Technical and Cartographic Drawing	Compulsory, 56	Summer	3
IG1204	Topography 2	Compulsory, 56	Summer	5
IG1205	Measurements Compensation and Statistics 1	Compulsory, 56	Summer	4
IG1206	General Geology	Compulsory, 42	Summer	3
IG1207	Geography	Compulsory, 28	Summer	3
IG1208	Foreign Language 2	Compulsory, 28	Summer	2
IG1209	Sport 2	Compulsory, 28	Summer	1
IG1210	Practice 1 (Topography)	Compulsory, 60	Summer	3
IG2101	Computer Programming and Numerical Methods	Compulsory, 42	Autumn	4
IG2102	Soil Study	Compulsory, 42	Autumn	4
IG2103	Civil, Industrial and Agricultural Engineering Elements	Compulsory, 42	Autumn	4
IG2104	Geodesy 1	Compulsory, 56	Autumn	5
IG2105	Measurements Compensation and Statistics 2	Compulsory, 56	Autumn	5
IG2106	Topography 2 Pr	Compulsory, 42	Autumn	2
IG2108	Foreign Language 3	Compulsory, 28	Autumn	2
IG2109	Sport 3	Compulsory, 28	Autumn	1
IG2201	Land Laws and Cadastral Legislation	Compulsory, 42	Summer	3
IG2202	Geodetic Measurements by Waves	Compulsory, 56	Summer	5
IG2203	Geodesy 2	Compulsory, 56	Summer	5
IG2204	Geodesy 2 Pr	Compulsory, 28	Summer	2
IG2205	Photogrammetry 1	Compulsory, 56	Summer	4
IG2207	Foreign Language 4	Compulsory, 28	Summer	2
IG2208	Sport 4	Compulsory, 28	Summer	1
IG2209	Practice 2 (Geodesy)	Compulsory, 60	Summer	3
IG3101	Remote Sensing and Photo Interpretation	Compulsory, 56	Autumn	4
IG3102	Mathematical Cartography	Compulsory, 56	Autumn	4
IG3103	Infographics for Topography and Cadastre	Compulsory, 56	Autumn	4
IG3104	Cadastre 1	Compulsory, 56	Autumn	4
IG3105	Photogrammetry 2	Compulsory, 28	Autumn	3
IG3106	Geodesy 3	Compulsory, 28	Autumn	3

IG31071	Automation of the Topographical and Geodetic Surveys	Elective (1 out of 2): 56	Autumn	4
IG31072	Land Surveying and Data Processing Techniques	Elective (1 out of 2): 56	Autumn	4
IG31081	Non-invasive methods and techniques of investigation in Archaeology	Elective (1 out of 2): 56	Autumn	4
IG31082	Archaeological Topography	Elective (1 out of 2): 56	Autumn	4
IG3201	Engineering Photogrammetry	Compulsory, 56	Summer	4
IG3202	Spatial Geodesy	Compulsory, 70	Summer	5
IG3203	Cadastre 2	Compulsory, 56	Summer	4
IG3204	Cartographic Projections	Compulsory, 56	Summer	4
IG3205	Urbanism	Compulsory, 42	Summer	3
IG3206	Geodesy 3 Pr	Compulsory, 14	Summer	2
IG32071	General Ecology	Elective (1 out of 2): 42	Summer	3
IG32072	Environment Protection and Sustainable Development	Elective (1 out of 2): 42	Summer	3
IG32081	Cadastral Rating	Elective (1 out of 2): 28	Summer	2
IG32082	Agro-Chemistry	Elective (1 out of 2): 28	Summer	2
IG3209	Practice 3 (Cadastre)	Compulsory, 60	Summer	3
IG4101	Cadastre 3	Compulsory, 56	Autumn	5
IG4102	Monitoring Land and Construction Behaviour	Compulsory, 56	Autumn	5
IG4103	Mining Topography	Compulsory, 56	Autumn	4
IG4104	The Evaluation of Fixed Assets	Compulsory, 56	Autumn	4
IG4105	Cadastre 2 Pr	Compulsory, 28	Autumn	2
IG41061	Engineering Measurements for Civil Engineering and Industry	Elective (1 out of 2): 56	Autumn	5
IG41062	Engineering Topography I	Elective (1 out of 2): 56	Autumn	5
IG41071	Computer Systems for Cadastre	Elective (1 out of 2): 56	Autumn	5
IG41072	Geographic Information Systems	Elective (1 out of 2): 56	Autumn	5
IG4201	Design and Optimisation of Geodetic Networks	Compulsory, 48	Summer	4
IG4202	Management of Geodetic Surveys	Compulsory, 36	Summer	3
IG4203	Spatial Planning and Urbanism	Compulsory, 48	Summer	3
IG4204	Methods and Techniques for Project Presentation	Compulsory, 24	Summer	2
IG4205	Hydrotechnical Constructions	Compulsory, 36	Summer	3
IG4206	Engineering Topography Pr	Compulsory, 24	Summer	2
IG4207	Engineering Topography II	Compulsory, 48	Summer	4
IG42081	Informatics system in Cadastre	Elective (1 out of 2): 24	Summer	2
IG42082	Geographical IT systems	Elective (1 out of 2): 24	Summer	2
IG42091	Geo-informatics	Elective (1 out of 2): 48	Summer	4
IG42092	Computerized Record Keeping of the Agricultural Real Estate	Elective (1 out of 2): 48		4
IG4210	Practice 4 (B.Sc. Thesis)	Compulsory, 60	Summer	3