

Educational Programme	Terrestrial measurements and Cadastre
Degree Awarded	Bachelor
Standard Length of Studies (Number of ECTS Credits)	4 years - 8 semesters - 240 ECTS
Type of Study	Full-Time
Higher Education Institution	Babeş-Bolyai University
Faculty / Department	Faculty of Geography
Contact Person	Prof. PhD Pandi Gavril , Reader PhD. Eng. Rus Ioan
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Profile of the Degree Programme	Geodesy Engineering
Target Group / Addressees	Graduates of secondary education with basic level of knowledge in mathematics wishing to further develop competencies in this field.
Entrance Conditions	50% baccalaureate examination score + 50% average mark score during highschool
Further Education Possibilities	Master Studies
Description of Study	The aim of the specialty is that of assuring a thorough and complex training in the field of terrestrial measurements and cadastre, and also GIS
Purposes of the Programme	<ol style="list-style-type: none"> 1. Train land surveying engineers by assuring advanced competences in computerized processing of land surveys 2. Assuring a proper skill force for Romania's land surveying needs, enabling graduates to satisfy workplace criteria with multidisciplinary traits in public administration, small and medium enterprises, etc. 3. Assuring quality preparation by relating the acquired traits in the field of technological information and leading technological advancements and equipment used in land surveys. 4. Ensure compatibility in the preparation of local surveying engineers with European Union quality standards; 5. Develop competencies which will allow the surveying engineers to strengthen their knowledge by following masters and doctoral degree studies; 6. Ensure the training of surveying engineers in the present study programme as to be able to become potential researchers.
Specialization / Area of Expertise	<p>The specialization covers fields such as: geodetical measurements, topographical measurements, land survey, cadastre, photogrammetry and photointerpretation, precision positioning (GPS), engineering topography (setting out buildings and networks, tracing the behaviour of civil and industrial constructions).</p> <p>The level of expertise may be different according to the instruction (topographer, analyst, evaluator, geodesist, expert, and so on).</p>

Extra Peculiarities	-
Practical Training	180 hours + 48 hours to put together Diploma Project
Final Examinations	Diploma Project
Gained Abilities and Skills	<p>I. General competences</p> <p>The ability to achieve the scientific and technical vocabulary necessary for the professional development at Bachelor Degree level, which will be used for preparing the next cycle (Master Degree).</p> <p>The ability to acquire the mathematical fundamentals which are compulsory for the understanding of the engineered fields which are studied.</p> <p>The ability to develop the creative skills related to the different applications and technologies.</p> <p>The ability to know the national and European legislation, both general and specific to the field.</p> <p>To have the ability to work in teams made up by specialists from different fields.</p> <p>II. Speciality competences</p> <p>The ability to acquire the specific knowledge regarding the performance of general and special land measurements and the optimal use of the distinctive instruments: total stations, global positioning systems (GPS), etc.</p> <p>The ability to acquire the information technology knowledge needed in the field: CAD, GIS, etc.</p> <p>The ability to develop the ability to create and finalize any type of specific project (topographical and land survey measurements, real estate register operations, projects concerning the applied topography in civil engineering, projects of tracing the behaviour of civil and industrial buildings, projects of drawing, projects of orthorectifying, photointerpretation, remote sensing and satellite analysis, Radar and Lidar applications, etc).</p> <p>The ability to develop the knowledge regarding economics (marketing and management).</p>
Job Placement, Potential Field of Professional Activity	<p>The certified engineer who graduates the specialization Terrestrial measurements and Cadastre may be employed in public or private specialized institutions, as well as a freelance professional.</p> <p>It is specialized and covers such fields like: geodetical measurements, topographical measurements, land survey, cadastre, photogrammetry and photointerpretation, precision positioning (GPS), engineering topography (setting out buildings and networks, tracing the behaviour of civil and industrial constructions).</p> <p>The level of expertise may be different according to the instruction (topographer, analyst, evaluator, geodesist, expert, and so on).</p>

Date: 28.10.2010

Signature:

Prof. PhD Pandi Gavril

Reader PhD. Eng. Rus Ioan