

Study program: Civil Engineering			
Course: Geodesy			
Professor/Assistant: PhD Dragan Ž. Perić / Simona Smiljković			
Status of course: compulsory			
ECTS credits: 6			
Pre-requisites: none			
Aims of the course: The objective of the course is to enable students to solve problems in construction, as well as to apply acquired knowledge in other professional and professional -applicative subjects. Preparing the student to: <ul style="list-style-type: none"> - understand the importance of application of geodesy in construction, in preparation of project documentation, in execution of works in construction, in monitoring the works performed; - be able to use accessories and devices for certain measurements for the needs of design and execution of works. 			
Learning outcomes: The outcome of this course is to train a student to competently solve tasks within the problems that arise when designing and executing works in the construction industry. The student is able to: <ul style="list-style-type: none"> - use accessories and devices for geodetic measurements; - determine the position of the object in space by means of coordinates; - collect data for the preparation of project documentation; - transfer the project elements from the project documentation into the field and use them for execution of works. 			
Syllabus: <u>Theoretical part</u> Meaning of measurement. Measurement errors. Coordinate systems. Plan and map. Calculating coordinates in the traverse. Accessories and devices for measuring length, height differences and angles. Measurement procedure for length, altitude difference and angles. Total station as a universal instrument. GPS as a universal geodetic device. Appropriate programs within Auto CAD for mapping recorded detail points. <u>Practical part</u> <ul style="list-style-type: none"> - field measurement, altitude differences and horizontal corners in the field for elaboration of elaborates; - preparation of tasks from the fields specified in theoretical instruction. Five self-made seminar papers. 			
Literature: <ol style="list-style-type: none"> 1. Kontić, S., <i>Geodezija</i>, Građevinski fakultet, 2004. 2. Tomić, S., <i>Geodezija</i>, VGGŠ Beograd, 2011. 3. Radulović, M., <i>Geodezija u graditeljstvu</i>, Univezitet u Prištini, 2004. 			
Number of active classes			Other forms of teaching:
Lectures: 3	Practical classes: 2	Research work: 0	
Teaching methods: Theoretical instruction with solutions to practical examples from geodesy. Practical exercises with an active approach to solving practical problems from technical practice. Application of acquired knowledge to independent work on 5 practical tasks.			
Grading system (maximum 100 points), grading scale from 5 to 10: below 51 points grade 5, grade 6 from 51-60 points, grade 7 from 61-70 points, grade 8 from 71-80 points, grade 9 from 81-90 points, grade 10 from 91-100 points.			
Pre-commitments	points	Final exam	points
activity during lectures	10	written exam	30
practical work		oral exam	20
colloquium(s)	10 + 10		
seminar paper(s)	20		
Sum	50	Sum	50