

COURSE		ENGINEERING GEODESY I		
LECTURER		Asst. Prof. Jusuf Topoljak Ph. D.		
STUDY	STATUS	SEMESTER	NUMBER OF LESSONS L+E	ECTS
B – G	Compulsory	5	2+3	6
OBJECTIVES				
<ul style="list-style-type: none"> ▫ Provide information for students about the methods of horizontal and vertical staking out of buildings, roads, dams etc.. 				
LEARNING OUTCOMES				
<ul style="list-style-type: none"> ▫ Understanding concepts related to stakeout objects ▫ Gaining competence for the application of different methods of staking out points and lines in various conditions 				
COURSE CONTENT				
<ul style="list-style-type: none"> ▫ The definition and tasks of engineering geodesy. ▫ The horizontal and vertical laying out methods. Measures of precision for angles, distances and elevation differences. Calculation of coordinates and their precision. ▫ Determination coordinates by intersection and three-point methods. ▫ Traverses in engineering geodesy. ▫ Linear coordinate transformations. ▫ Determination of areas and volumes. ▫ Circular curve. Special problems of calculation and laying out of simple and compound curves. 				
RECOMMENDED LITERATURE				
<ol style="list-style-type: none"> 1. K. Frankić: <i>Inženjerska geodezija</i>, Skripta, Građevinski fakultet sarajevo, 2010 2. S. Pašalić: <i>Inženjerska geodezija</i>, Univerzitet u Sarajevu, Sarajevo, 1995 3. A. Mulahusić, J.Topoljak, N. Tuno: <i>Inženjerska geodezija I u praksi</i>, Praktikum, Građevinski fakultet Sarajevo, 2016. 4. Hennecke F., Müller G., Werner H.: <i>Handbuch Ingenieurvermessung, Band 1, Grundlagen</i>, Verlag für Bauwesen, 1994. 				
Examination:				
<p>The mid-term exam and the end-of-term exam (assessment based on a written tests related to solving practical issues) are organized during the semester. Each practical exam is scored out of a maximum of 25 score points. The pass mark for each practical exam is 55 % (13,75 points). The total score is computed as a sum of the scores from the mid-term exam and the end-of-term practical exam. In case the student gets less than 55% of the mid-term examination marks, he is considered failed, and has to set for re-examination at the end-of-term exam (an integrated written practical exam – maximum 50 score points). The pass mark for this integrated practical exam is 55 % (27,5 points). In case the student does not achieve the minimum requirements to pass the end-of-term exam or integrated practical exam, he is considered failed, and has to set for re-examination during the assigned examination period (January – February), under the same rules as in the previous cases. The students who do not achieve the required scores on this exam, can satisfy the assesment related to solving practical issues by passing the integrated written supplementary exam in September, with the score of 55% or higher.</p> <p>Final written examinations related to theoretical issues are held during the assigned end-of-semester examination period (January – February). The practical exam must be passed before the theoretical exam, i.e. the students must earn a minimum of 27,5 points. Final theoretical exam is scored out of a maximum of 50 score points. The pass mark for this exam is 55 % (27,5 points). In case the student does not achieve the minimum requirements to pass the final exam, he is considered failed, and has to set for re-examination during the assigned examination period (second final exam). Students who do not achieve the required scores on this exam, can satisfy the assesment related to solving practical and theoretical issues by passing the integrated supplementary written exams in September, with the score of 55% or higher, under the same rules as in the previous cases.</p> <p>Once the exams are passed, the total score is computed as a sum of scores from the practical exam and the theoretical exam and grade is formed in accordance to a scale prescribed by the Law on Higher Education.</p>				