

Study program: Civil engineering				
Type and level of studies: Bachelor studies, UAS (Undergraduate academic studies)				
Course unit: Traffic systems and road desing				
Teacher in charge: Mandić Vladimir				
Language of instruction: English				
ECTS: 6				
Prerequisites: Geodesy exam passed and knowledge of AutoCAD				
Semester: SS (summer semester)				
Course unit objective: Introducing students to basic knowledge in the field of traffic infrastructure systems and basic principles in road design.				
Learning outcomes of the course unit Acquiring theoretical and professional knowledge in the field of traffic infrastructure systems, training students to prepare technical documentation of less demanding local roads, and introducing students to Plateia road design software.				
Course unit contents				
<i>Theoretical classes</i> Theoretical classes includes the following units: Constructive elements of roads; Road classification; Fundamentals of the theory of vehicle movement; Cross profile of the road; Horizontal routing; Elements of the longitudinal profile; Road sweeping; Spatial routing; Design Elements; Basic types of pavement structures; Fundamentals of dimensioning of rigid and flexible pavement structures (principles, program conditions, methods...).				
<i>Practical classes</i> creation of a semester assignment (technical documentation for given local road parameters) and training for working in road design software.				
Literature 1. Robinson, Richard, and Bent Thagesen. Road engineering for development. CRC Press, 2018.				
Number of active teaching hours				Other classes
Lectures: 30	Practice: 15	Other forms of classes: /	Independent work: 15	/
Teaching methods : Lectures and exercises, or mentoring work with a smaller number of students.				
Examination methods (maximum 100 points)				
Exam prerequisites	No. of points:	Final exam	No. of points:	
Student's activity during lectures	5	oral examination	40	
practical classes/tests	5	written examination	30	
Seminars/homework	/		
Project	20			
Other	/			
Grading system				
Grade	No. of points	Description		
10	95-100	Excellent		
9	85-94	Exceptionally good		
8	75-84	Very good		
7	65-74	Good		
6	55-64	Passing		
5	Less than 55	Failing		