

<b>Study Programme: Civil Engineering</b>			
<b>Course Unit Title: FEM modeling in Structural Analysis</b>			
<b>Course Unit Code: GG413</b>			
<b>Name of Lecturer(s): Kovačević Dušan</b>			
<b>Type and Level of Studies: bachelor</b>			
<b>Course Status (compulsory/elective): elective</b>			
<b>Semester (winter/ summer): summer</b>			
<b>Language of instruction: english</b>			
<b>Mode of course unit delivery (face-to-face/distance learning): face-to-face</b>			
<b>Number of ECTS Allocated: 4</b>			
<b>Prerequisites: none</b>			
<b>Course Aims:</b> Gaining of primary knowledge in the field of FEM modeling and analysis of engineering structures			
<b>Learning Outcomes:</b> Competence for FEM modeling and structural analysis.			
<b>Syllabus.</b> The finite element method. FEM modeling technology for civil engineering structures. Some aspects of computer technology important for the FEM modeling. The principles of solving problems using appropriate FEM software. The essence of some numerical methods. Principles for the development and use of CASA (Computer Aided Structural Analysis) software. Characteristics of CASA software. Showing some software solutions. Capabilities for modeling behavior of structures for different effects using AxisVM software.			
<b>Required Reading:</b> Relevant literature in English, tbd			
<b>Weekly Contact Hours:2</b>	<b>Lectures: 3</b>	<b>Practical work:</b>	
<b>Teaching Methods:</b> Interactive work with the students because of continuous monitoring of the level of student learning. Theoretical analysis of the phenomenon that covered by content and numerical modeling.			
<b>Knowledge Assessment (maximum of 100 points):</b>			
<b>Pre-exam obligations</b>	points	<b>Final exam</b>	points
Attendance			
Computer exercises			
Tests (4x)			

