

Study Programme: Civil Engineering			
Course Unit Title: Structural fire analysis			
Course Unit Code: GK531			
Name of Lecturer(s): Radujković Aleksandra			
Type and Level of Studies: master			
Course Status (compulsory/elective): elective			
Semester (winter/ summer): summer			
Language of instruction: english			
Mode of course unit delivery (face-to-face/distance learning): face-to-face			
Number of ECTS Allocated: 5			
Prerequisites: none			
Course Aims:. Acquiring knowledge about the principles of analysis and design of structures exposed to fire.			
Learning Outcomes: Ability to calculate the actions of fire on structures and to understand the behavior of structures during a course of fire.			
Syllabus. General on fires: conditions of formation and types of fire in structures. Defining the relevant fire scenario. design fire types. Thermal and mechanical properties of building materials at elevated temperatures (concrete, steel, wood). Basics of calculation of fire resistance of structures according to Eurocode standards. Application of software tools in fire analysis of structures.			
Required Reading: Relevant literature in English, tbd			
Weekly Contact Hours:2		Lectures: 2	
Practical work: 2			
Teaching Methods: Lectures. Auditing and computer exercises. Consultations. Continuous monitoring of level of knowledge, colloquium and exam.			
Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations	points	Final exam	points
Attendance			
Computer exercises			
Tests (4x)			

