Course Unit Descriptor

Study Programme: Civil Engineering
Course Unit Title: Structural Systems
Course Unit Code: A521
Name of Lecturer(s): Kovačević Dušan
Type and Level of Studies: bachelor
Course Status (compulsory/elective): compulsory
Semester (winter/ summer): winter
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 the basic knowledge required for the choice of optimal structural system in accordance with an architectural object.
Learning Outcomes: Competence of for the choice of optimal structural system in accordance with an architectural object.
Syllabus. Definition of structural system. Overview of the evolution of structural systems. Classification of structural systems. Basic principles of building. Load capacity. Stability. Serviceability. Durability. Principles of structural system selection. Building-structure relationship. Line and surface systems - transfer of forces. Methods of construction. Structures of building: horizontal and vertical structural elements. The skeleton system. Panel system. Industrial facilities. Large span girders. Review of characteristic buildings. Basics of structural analysis - structural modeling.
Required Reading: Relevant literature in English, tbd

Weekly Contact Hours:2	**Lectures: 2**	**Practical work: 1**

Teaching Methods: Lectures. Auditory and computer exercises. Consultation. Continuous monitoring of the level of student's knowledge, colloquium and exam.
Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	**Final exam**	points
Attendance			
Computer exercises			
Tests (4x)			