Faculty of Civil Engineering / Građevinarstvo (2017) / Uvod u građevinarstvo

Prerequisites	There is no conditionality by other exams.
Aims	Introduction to the basic concepts in construction and architecture, and the greatest achievements of construction in history as well. Introduction to the most important areas of civil engineering. To understand the historical development of the profession of civil engineer.
Lecturer / Teaching assistant	Marija Jevrić
Metdod	Lectures and consultations, visiting construction sites
Week 1, lectures	Introduction to the objectives of the subject. Basic concepts in construction and architecture. Selected examples of top construction skills. About the profession of a civil engineer.
Week 1, exercises	
Week 2, lectures	History of construction and architecture: construction in Prehistory; architecture, cities and canals of Mesopotamia. Egyptian temples and tombs. Cretan - Mycenaean culture. Rome and the engineers of antiquity. Architecture of Byzantium and Romanesque.
Week 2, exercises	
Week 3, lectures	Vaults and supports of Gothic cathedrals. Renaissance architecture, fortifications and cities. Prominent constructors. Baroque, Rococo and Classicism.
Week 3, exercises	
Week 4, lectures	The Industrial Revolution. Great engineers and architects of the XX Century. Roads, railways and hydraulic constructions of the XX Century.
Week 4, exercises	
Week 5, lectures	Technical regulations, standards and norms in the field of construction; technical documentation; types of construction jobs; energy efficiency facilities.
Week 5, exercises	
Week 6, lectures	1st part of the exam
Week 6, exercises	
Week 7, lectures	Contemporary construction: Construction project management, basic concepts and the importance of it.
Week 7, exercises	
Week 8, lectures	Contemporary construction: Tall buildings, basic principles of design and construction.
Week 8, exercises	
Week 9, lectures	Contemporary construction: Bridges, basic construction systems and construction methods.
Week 9, exercises	
Week 10, lectures	Contemporary construction: Roads, basic concepts and design principles.
Week 10, exercises	
Week 11, lectures	Contemporary construction: Basic concepts of hydraulic engineering. Dams and hydraulic structures, basic principles of design and construction.
Week 11, exercises	
Week 12, lectures	Contemporary construction: Underground objects, basic principles of design and construction. Basic concepts of geotechnics.
Week 12, exercises	
Week 13, lectures	Contemporary construction: Wooden constructions, basic principles of design and construction.
Week 13, exercises	
Week 14, lectures	Presentations of seminal papers.
Week 14, exercises	
Week 15, lectures	2nd part of the exam.
Week 15, exercises	
Student obligations	To attend lectures, do seminal papers and sit their exams.
Consultations	Mon, 11-12 h Thu, 11-12 h

Workload	Weekly 3.0 credits x 40/30 = 4 hours Total workload to the course: 3.0 x 30 = 90 hours
Literature	
Examination metdods	The forms of knowledge testing and grading: Assessment is carried out continuously throughout the semester and the final exam. If the student shows a minimally sufficient level of knowledge during the semester can earn 51/100 points.
Special remarks	
Comment	Additional information can be obtained at the present teaching staff, Head of the study program, and at Vice Dean for academic affairs.
Learning outcomes	After passing the exam, students will: 1. Know the basic concepts in construction and architecture and be prepared to listen to courses in the coming semesters; 2. Have an insight into the specifics of the profession of civil engineer and various fields of construction, as well as modern concepts in construction such as sustainable development, energy efficiency and green building; 3. Know the basics of the history of construction, as well as the most influential authors and their facilities; 4. Know the basic concepts in the construction of bridges, buildings, roads, then hydraulic and geotechnics and project management.