

Study Programme: Information Technologies			
Course Unit Title: Computer Organisation			
Course Unit Code: IT616			
Name of Lecturer(s): Milan Vidaković			
Type and Level of Studies: Bachelor Academic Degree			
Course Status (compulsory/elective): Elective			
Semester (winter/summer): Summer			
Language of instruction: Serbian (primary), English (secondary)			
Mode of course unit delivery (face-to-face/distance learning): Face-to-face			
Number of ECTS Allocated: 6			
Prerequisites: None			
Course Aims: Acquiring basic knowledge and skills in digital electronic components and computer hardware, as well as in low level programming languages.			
Learning Outcomes: A student will be able to comprehend basic principles of digital electronic components and computer organisation and architecture. A student will also be able to understand advanced component architectures, advanced computer architectures, and multiprocessor architectures.			
Syllabus: <i>Theory</i> Computer. Computer organisation and functioning. System and application software. Numbers. Boolean algebra. Computer arithmetics. Hardware implementation of boolean functions. Processor. Memory. Cache memory. Bus. Input-output subsystem. Peripherals. <i>Practice</i> Modern processors and organisation. Machine language and assembler programming. Using assembler, linker and debugger. Combinatory and sequential circuits simulation.			
Required Reading: 1. William Stallings, Computer Organization and Architecture, Pearson, 2015			
Weekly Contact Hours: 4	Lectures: 2	Practical work: 2	
Teaching Methods: Lectures and students practical work.			
Knowledge Assessment (maximum of 100 points): 100			
Pre-exam obligations	points	Final exam	points
Active class participation		written exam	
Practical work	60	oral exam	40
Preliminary exam(s)			
Seminar(s)			

The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam,

project presentation, seminars, etc.