**Computer architecture (ECTS credits 6)**

Language: the course is offered in Serbian and Hungarian.  
  
**Course description:**Theoretical teaching:  
The concept of computer architecture. Computer model. The machine representation of the data. Computer organization: processor, memory, coding and machine commands formats, processor organizing, CISC, RISC, input-output subsystem, buses, interrupts. Memory hierarchy: work, mass, associative and virtual memory.  
Practical teaching:  
Practical classes at the computer lab follow the lectures. It includes the construction of ALU, RAM memory and stack memory simulation, and also operations with serial and parallel communication protocols that are used in microcomputer environments.

**Aim:**  
Introducing the architecture and components of the digital computers   
**Learning outcomes:**

Understanding the organization of hardware elements in the digital computer along with the technical and technological problems in the construction of computers. Acquired knowledge of the basic protocols used in microcomputer environments.