

Title Computer architecture	Code 1010331411010330611
Field Computer Science	Year / Semester 1 / 1
Specialty -	Course core
Hours Lectures: 2 Classes: - Laboratory: 2 Projects / seminars: -	Number of credits 4
	Language polish

Lecturer:

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Status of the course in the study program:

Core

Assumptions and objectives of the course:

Main objective of the course is to provide students with basic knowledge on processors and computer systems

Contents of the course (course description):

General computer building. Data representation. Operations. Assembler and machine language programming. Memory system organization. Protection of resources. Exceptions. Interfaces and communication. Central processing unit. Pipelining. Superscalar processor. Examples of RISC processors. Examples of CISC processors. Processors VLIW and EPIC. Multiprocessor. Multicomputer. Multithreading. Multi core processors. Performance evaluation. Alternative architectures. Evolution of processors.

Introductory courses and the required pre-knowledge:

Basic knowledge of digital circuits

Courses form and teaching methods:

Lecture with multimedia presentation.
Laboratory

Form and terms of complete the course - requirements and assessment methods:

Lecture: written exam
Laboratory: evaluation of experiments, tests, reports

Basic Bibliography:

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Additional Bibliography:

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