Title	Code
Fundamentals of Microprocessor Technology	**1010334441010320561**
Field: **Computer Science**	Year / Semester: **2 / 4**
Specialty: **-**	Course: **core**
Hours: Lectures: **1** Classes: **-** Laboratory: **-** Projects / seminars: **-**	Number of credits: **4**
	Language: **polish**

Lecturer:

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Status of the course in the study program:

Obligatory subject, Faculty of Electrical Engineering, extramural undergraduate studies, field: Computer Science.

Assumptions and objectives of the course:

The objective of the course is to gain thorough knowledge of the theoretical and practical issues related to the construction of electronic components and systems, including microprocessor and computer ones, and the fundamentals of their design and programming.

Contents of the course (course description):

Number systems, codes, digital logic circuits, gates, flip-flops, counters, shifters. Construction of processors - classification schemes. CPU, bus, programmable memory, mass, interfaces. Microprocessors, microcontrollers. Programmable Controllers PLC systems, input / output - RS-xxxx, I2C-bus and other communication systems - CAN protocols, and other surveillance systems (polling) and security, running. DSPs, ASICs, wireless sensor networks.

Introductory courses and the required pre-knowledge:

Basic knowledge of electrical engineering, electronics and digital-circuit engineering.

Courses form and teaching methods:

The lecture supported by multimedia presentation.

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

Tests in a written form, exam.

Basic Bibliography:

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Additional Bibliography:

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