

Title Electronics and Power Electronics	Code 1010321231010320142
Field Electrical Engineering	Year / Semester 2 / 3
Specialty -	Course core
Hours Lectures: 2 Classes: - Laboratory: - Projects / seminars: -	Number of credits 5
	Language polish

Lecturer:

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Status of the course in the study program:

Obligatory course, Faculty of Electrical Engineering, field Electrical Engineering.

Assumptions and objectives of the course:

Absorbing of knowledge for analysis and synthesis of electronic circuits.

Contents of the course (course description):

Features of basic electronic components as: diodes, transistors and passive elements. Optoelectronic devices ? features and application areas. Introduction to linear circuits with feedback loop; stability problem. Operational amplifiers and applications of these in analog electronics. Power amplifiers. Electronic generators basics. Analog filters ? designing and application areas. Digital electronics basics: binary systems, Boolean operations, gates and functional blocs. TTL family. Features and applications of semiconductor memories: SRAM, DRAM, EEPROM, FLASH.

Introductory courses and the required pre-knowledge:

Basic knowledge about physics, electrical engineering and mathematical analysis.

Courses form and teaching methods:

Lectures.

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

Written examination.

Basic Bibliography:

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Additional Bibliography:

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