

Title Control of Power Electronic Systems	Code 10103222310103201125
Field Electrotechnics	Year / Semester 2 / 3
Specialty Microprocessor Control Systems in Electrotechnics	Course core
Hours Lectures: 1 Classes: - Laboratory: 1 Projects / seminars: 1	Number of credits 6
	Language polish

Lecturer:

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Status of the course in the study program:

Obligatory course, Faculty of Electrical Engineering, field: Electrical Engineering, speciality: Microcomputer Control Systems in Electrical Engineering.

Assumptions and objectives of the course:

Presentation of methods and control systems (open and closed) designed for shaping required output quantities in power electronic systems.

Contents of the course (course description):

Shaping methods of required output quantities in power electronic in open and closed systems. Methods and properties of control with width pulse modulation (PWM). Application of digital adaptive filters in power electronic system control. General characteristics of transistor power module (IPM). Specialistic PWM processors. Examples of selected power electronic systems.

Introductory courses and the required pre-knowledge:

Basic knowledge of electrotechnics, electronic, power electronics and control theory.

Courses form and teaching methods:

Lectures, laboratory.

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

Laboratory examination, written and oral exam.

Basic Bibliography:

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Additional Bibliography:

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