

Title Selected problems of circuit theory	Code 10103222210103201104
Field Electrical Engineering	Year / Semester 1 / 2
Specialty -	Course core
Hours Lectures: 2 Classes: 1 Laboratory: 1 Projects / seminars: -	Number of credits 5
	Language polish

Lecturer:

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Status of the course in the study program:

Obligatory course for Direction II studies is electrical engineering degree (MSc) Faculty of Electrical.

Assumptions and objectives of the course:

Understanding the physical quantities and fundamental circuit theory. Knowledge of analytical methods for calculating circuit current and alternating current. Understanding the fundamental properties and methods of analysis of sinusoidal alternating current circuits and niesinusoidalnego. Knowing the theory of four-terminal networks and filters. Understanding the basic elements and electronic circuits.

Contents of the course (course description):

Linear circuits with periodic odcztałconymi currents in steady state. Classic method and Laplace operators? And analysis of transients in linear systems. Electrical circuits with discrete time. Fourier Transform. Selected electronic components. Circuits and electronic systems.

Introductory courses and the required pre-knowledge:

Fundamentals of electromagnetism (physics). Algebra of complex numbers. Vector Analysis. Transformations. Fundamentals of the theory of differential equations. Introduction to the theory of electrical circuits (in the basics of electrical engineering).

Courses form and teaching methods:

Lecture illustrated with films and slides, exercises accounting, laboratory exercises.

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

Exercises, written tests on the accounting, credit.

Basic Bibliography:

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Additional Bibliography:

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