Title Selected problems of circuit theory	Code 1010325221010320440
Field	Year / Semester
Electrical Engineering	1/2
Specialty	Course
-	core
Hours	Number of credits
Lectures: 2 Classes: 10 Laboratory: 1 Projects / seminars: -	5
	Language
	polish

Lecturer:

D.Sc., PhD Konrad Skowronek, tel. +48 61 665 27 88, +48 61 665 23 82; e-mail: Konrad.Skowronek@put.poznan.pl

Faculty:

Faculty of Electrical Engineering ul. Piotrowo 3A 60-965 Poznań tel. (061) 665-2539, fax. (061) 665-2548 e-mail: office_deef@put.poznan.pl

Status of the course in the study program:

Obligatory course at the Faculty of Electrical Engineering, Faculty of Electrical Engineering, part-time secondary education.

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 odkształconymi 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:

Written tests on laboratory exercises and accounting, credit.

Basic Bibliography:

Additional Bibliography: