

Title Electromagnetic Compatibility	Code 1010325231010320446
Field Electrical Engineering	Year / Semester 2 / 3
Specialty -	Course core
Hours Lectures: 1 Classes: - Laboratory: 1 Projects / seminars: -	Number of credits 4
	Language polish

Lecturer:

prof. dr hab. inż. Wojciech Machczyński
tel. +48 61 6652383
e-mail: Wojciech.Machczynski@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, Electrical Engineering Faculty, Field: Electrical Engineering, Extramural Masters Studies

Assumptions and objectives of the course:

Student should obtain knowledge and deep understanding of EMC principles. He/She should be able to solve simple problems associated with EMC simulation.

Contents of the course (course description):

Introduction to electromagnetic compatibility (EMC), definitions, units. Fundamentals of electromagnetics and signal analysis. Natural and man-made sources of electromagnetic interference (EMI), classification and parameters of electromagnetic disturbances. Mechanism of propagation of electromagnetic disturbances, EM coupling process, electromagnetic interaction with electric devices and systems. Electromagnetic interference on environment. EMI mitigation methods and devices. EMC simulation.

Introductory courses and the required pre-knowledge:

Theoretical Electrotechnics.

Courses form and teaching methods:

Lectures supported by transparencies.

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

Examination at the end of the semester.

Basic Bibliography:

-

Additional Bibliography:

-