

Title Coding Theory	Code 1018051310108030309
Field Electronics and Telecommunications	Year / Semester 2 / 3
Specialty -	Course core
Hours Lectures: 2 Classes: 10 Laboratory: - Projects / seminars: -	Number of credits 0
	Language polish

Lecturer:

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Status of the course in the study program:

Obligatory course, Faculty of Electronics and Telecommunications, field Electronics and Telecommunications

Assumptions and objectives of the course:

Knowledge of most important classes of error-correcting and detecting codes and their decoding methods

Contents of the course (course description):

Idea of redundant coding, code classification, methods of block code description, polynomial codes, cyclic codes, Galois fields and their application in construction of block codes, algebraic and non-algebraic decoding of block codes, non-binary codes, method of description of convolutional codes, algebraic and sequential decoding of convolutional codes, turbo-codes and their decoding, trellis coding

Introductory courses and the required pre-knowledge:

Basic knowledge of communication systems and information theory, and field algebra

Courses form and teaching methods:

Lectures in the form of multi-media presentations, classes based on problems solving

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

A test in the 14th week of the semester based on problems solving, written exam on the theory

Basic Bibliography:

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Additional Bibliography:

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