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Title Digital communication systems	Code 1018011610108100081
Field Electronics and Telecommunications	Year / Semester 3 / 6
Specialty	Course
•	core
Hours	Number of credits
Lectures: 3 Classes: - Laboratory: - Projects / seminars: -	0
	Language
	polish

### Lecturer:

prof. dr hab. inż. Krzysztof Wesołowski

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## Faculty:

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# Status of the course in the study program:

Obligatory course in the field of studies Electronics and Telecommunications (Faculty of Electronics and Telecommunications)

### Assumptions and objectives of the course:

The course aims at getting acquainted with theoretical foundations of digital communication systems

## Contents of the course (course description):

Sources of digital signals for communication systems, baseband transmission, digital modulations of a sinusoidal carrier (ASK, PSK, FSK and QAM), optimum coherent and non-coherent receiver, continuous phase modulations, trellis coded modulations, multitone OFDM transmission, properties of the most important type of transmission channels, channel equalization, sequential detection, timing and carrier synchronization algorithms and structures, examples of digital communication systems

## Introductory courses and the required pre-knowledge:

Basic knowledge in communication systems, signal theory and statistics and probability theory

### Courses form and teaching methods:

Lectures and excercises tought during lecture hours

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

Written examination

## **Basic Bibliography:**

Additional Bibliography: