

Title <b>Digital Transmission Systems</b>	Code <b>1018011810108120286</b>
Field <b>Electronics and Telecommunications</b>	Year / Semester <b>4 / 8</b>
Specialty -	Course <b>core</b>
Hours Lectures: <b>2</b> Classes: -    Laboratory: -    Projects / seminars: -	Number of credits <b>0</b>
	Language <b>polish</b>

**Lecturer:**

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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):**

Pulse modulations and pulse-code modulation (PCM), elements of information theory (channel capacity), baseband transmission, digital modulations of a sinusoidal carrier (ASK, FSK, PSK, DPSK and QAM), optimum coherent and non-coherent receiver, continuous phase modulations (CPM), trellis coded modulations (TCM), multitone OFDM transmission, 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 with illustrative examples

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

Written examination

**Basic Bibliography:**

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**Additional Bibliography:**

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