Title Code 1018051110108120296 **Digital Systems Design** Field Year / Semester **Electronics and Telecommunications** 1/1 Course Specialty core Hours Number of credits 6 Lectures: 1 Classes: **15** Laboratory: -Projects / seminars: Language polish

Lecturer:

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Faculty:

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Status of the course in the study program:

Obligatory course, Faculty of Electronics and Telecommunications

Assumptions and objectives of the course:

Knowledge of design digital circuits and systems.

Contents of the course (course description):

Sequential circuits: registers (parallel, shifter), counters. Micro-operations of counters and registers. Examples: counter ?194 and ?163. Memory: RAM i ROM. Decomposition a digital system into operational and control subsystems. Programmable systems design ? PLD/FPGA. Programmable logic arrays (PAL, GAL, PLA).

Programmable logic devices. Examples of using in cryptography and control systems.

Introductory courses and the required pre-knowledge:

Basic knowledge of logics and digital circuits design.

Courses form and teaching methods:

Lectures in the form of multi-media presentations.

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

Written exam.

Basic Bibliography:

Additional Bibliography: