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#### Title Code 1018011410108120267 **Digital Systems Design** Field Year / Semester **Electronics and Telecommunications** Course Specialty Hours Number of credits Classes: 15 Laboratory: 1 Lectures: 3 Projects / seminars: Language polish Lecturer: dr inż. Piotr Remlein Katedra Radiokomunikacii tel. 665-3934, fax. 665-3823

## Faculty:

Faculty of Electronics and Telecommunications

ul. Piotrowo 3A 60-965 Poznań

tel. (061) 665-2293, fax. (061) 665-2572

e-mail: office det@put.poznan.pl

e-mail: remlein@et.put.poznan.pl

## Status of the course in the study program:

Obligatory course, Faculty of Electronics and Telecommunications

## Assumptions and objectives of the course:

Knowledge of basic design digital circuits and systems.

### Contents of the course (course description):

Number systems, binary arithmetic, Boolean algebra, logical functions, design of combinational circuits, minimization method?s, arithmetic circuits, programmable logic devices, sequential circuits, flip-flops, registers and counters, sequential circuits analysis and design, automated synthesis of finite-state machines based on Mealy and Moore models, asynchronous circuits

### Introductory courses and the required pre-knowledge:

Basic knowledge of logics and electronics.

## Courses form and teaching methods:

Lectures in the form of multi-media presentations, laboratory, projects.

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

Lab reports, written exam.

# **Basic Bibliography:**

#### Additional Bibliography: