

Title <b>(Układy cyfrowe)</b>	Code <b>1010334411010330542</b>
Field <b>Computer Science</b>	Year / Semester <b>1 / 1</b>
Specialty -	Course <b>core</b>
Hours Lectures: <b>8</b> Classes: -    Laboratory: <b>1</b> Projects / seminars: -	Number of credits <b>4</b>
	Language <b>polish</b>

**Lecturer:**

dr inż. Krzysztof Chmiel  
Instytut Automatyki i Inżynierii Informatycznej  
tel. 61 665 35 31  
e-mail: krzysztof.chmiel@put.poznan.pl

**Faculty:**

Faculty of Electrical Engineering  
ul. Piotrowo 3A  
60-965 Poznań  
tel. (061) 665-2539, fax. (061) 665-2548  
e-mail: office\_deef@put.poznan.pl

**Status of the course in the study program:**

Obligatory course, Faculty of Electrical Engineering, field Computer science.

**Assumptions and objectives of the course:**

Knowledge of mathematical models, methods of synthesis and CAD tools of digital circuits.

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

Combinatorial and sequential digital circuits. Boolean functions and finite automata as mathematical models of the circuits. Realization of Boolean functions with use of logic gates, multiplexors, demultiplexors, ROMs and logic arrays. Realization of automata with use of flip-flops. Integrated digital circuits. Microprogrammed circuits and flow diagrams. Concurrent circuits and Petri nets. CAD tools.

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

Fundamentals of mathematical logic and electronics.

**Courses form and teaching methods:**

Lectures, laboratory exercises.

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

Credit for lectures and laboratory exercises.

**Basic Bibliography:**

-

**Additional Bibliography:**

-