

Title Computing science in energetics	Code 1010332421010310685
Field Computer Science	Year / Semester 1 / 2
Specialty -	Course core
Hours Lectures: 1 Classes: - Laboratory: 1 Projects / seminars: -	Number of credits 3
	Language polish

Lecturer:

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Status of the course in the study program:

Obligatory course, Faculty of Electrical Engineering, field Computer Science, second-degree stationary study

Assumptions and objectives of the course:

Acquainting with principles of the function realized by computer systems in energetics. Moving good practice from the domain of energetics to the computer science, getting the ability of the effective communication with specialists from the domain of energetics.

Contents of the course (course description):

Introduction to energetics; power system and electric power system. Mathematical models for computational needs in energetics. Digital mapping of the power grid. Bases of converting signals for electric power engineering, estimation of the critical values in power system automation. Characteristics and examples of the synthesis of standard algorithms for purposes of metering and decision-making for electrical power engineering automation. Data bases in energetics. Systems and methods of managing the energy in processes: of the generation, distribution and converting energy at the final consumer.

Introductory courses and the required pre-knowledge:

Basic knowledge of scope of physics, mathematics and electrical engineering.

Courses form and teaching methods:

Lecture with support of multimedia techniques.

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

Final test.

Basic Bibliography:

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Additional Bibliography:

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