Title	Code
Computer Simulation (Symulacje komputerowe (PI))	**1010401161010410759**
Field: **EDUCATION IN TECHNOLOGY AND INFORMATICS**	Year / Semester: **3 / 6**
Specialty: **-**	Course: **core**
Hours: Lectures: **1** Classes: **1** Laboratory: **-** Projects / seminars: **-**	Number of credits: **6**
	Language: **polish**

Lecturer:

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Faculty:

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Status of the course in the study program:

Core course of the study for Education in Technology and Informatics, Faculty of Technical Physics.

Assumptions and objectives of the course:

Students should get acquainted with various ways in which computers are used in solving elementary problems in physics.

Contents of the course (course description):

Introduction to the computational physics, i.e. this field of physics in which the basics research instrument is a computer. Formulation of physical problems in such a way, that their solutions can be found using numerical computations. Presentation of the methods with which some physical phenomena can be analyzed by their numerical simulation.

Introductory courses and the required pre-knowledge:

General knowledge of computers. Ability to perform some basic operations connected with the switching on of a computer, preparing it to work within the environment of a chosen compiler.

Courses form and teaching methods:

Lectures performed with the use of the multimedial techniques, in particular live presentation of the structure and functioning of the computer programs developed by the lecturer aimed at solving some simple problems. Exercises in the computer laboratory. Work with individual students.

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

Written examination checking the knowledge of the students at the end of the lectures. Evaluation of the computer programs developed by students.

Basic Bibliography:

1. Dieter W. Heermann, "Podstawy symulacji komputerowych w fizyce", WNT Warszawa 1997 and additional materials provided by the lecturer.

Additional Bibliography:

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