Poznan University of Technology
Faculty of Technical Physics

European **C**redit **T**ransfer **S**ystem

Title **Informative Systems (Systemy informatyczne)**	Code **1010401131010210645**
Field **EDUCATION IN TECHNOLOGY AND INFORMATICS**	Year / Semester **2 / 3**
Specialty **-**	Course **core**
Hours Lectures: **1** Classes: **-** Laboratory: **2** Projects / seminars: **-**	Number of credits **4**
	Language **polish**

Lecturer:

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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 will obtain knowledge of the architecture of the computer and operating systems. Furthermore, some advanced elements of the C++ language will be introduced.

Contents of the course (course description):

> The program of the subject includes familiarization students with the following issues: computer and operating system, mainframe computer systems, multiprogramming, CPU scheduling, multitasking, processes, virtual memory, multiprocessor systems, distributed systems, clustered systems, real time operating systems, architecture of the computer and operating systems, memory. Furthermore, the advanced elements of the C++ language are as follows: classes, operators overloading, exception handling, dynamic data structures, namespaces.

Introductory courses and the required pre-knowledge:

> C/C++ programming skills.

Courses form and teaching methods:

> Lectures and computer laboratory classes.

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

> Written examination. Marks for computer programs and individual work.

Basic Bibliography:

1. A. Silberschatz, P.B. Galvin, G. Gagne, Podstawy systemów operacyjnych ? Wydanie 7, WNT Warszawa 2005.
2. W. Stallings, Systemy operacyjne ? Struktura i zasady budowy, PWN Warszawa 2006.
3. W. Stallings, Organizacja i architektura systemu komputerowego ? Projektowanie systemu a jego wydajność, WNT Warszawa 2000.
4. H. M. Deitel, P. J. Deitel, Arkana C++ Programowanie, Wydawnictwo RM, Warszawa 1998.
5. S. Prata, Szkoła Programowania. Język C++, Wydawnictwo Helion, Gliwice 2006.
6. J. Grębosz, Symfonia C++. Programowanie w języku C++ orientowane obiektowo, Tom 1,2,3, Oficyna Kallimach, Kraków 1999.

http://www.put.poznan.pl/

7. A. Karbowski, E. Niewiadomska-Szynkiewicz, Programowanie równoległe i rozproszone, Oficyna Wydawnicza Politechniki Warszawskiej, Warszawa 2009.

Additional Bibliography:

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