COURSE DESCRIPTION CARD - SYLLABUS

Course name
Information Technology - advanced profile

Course

Field of study
Circular System Technologies
Year/Semester
1/1
Area of study (specialization)
-
Profile of study
general academic
Level of study
First-cycle studies
Course offered in
polish
Form of study
full-time
Requirements
elective

Number of hours

Lecture
0
Laboratory classes
0
Other (e.g. online)
0
Tutorials
0
Projects/seminars
30

Number of credit points

3

Lecturers

Responsible for the course/lecturer:
dr inż. Maciej Staszak, Politechnika Poznańska, Wydział Technologii Chemicznej, ul. Berdychowo 4, Poznań. Email: maciej.staszak@put.poznan.pl

Responsible for the course/lecturer:
dr hab. inż. Katarzyna Staszak, Politechnika Poznańska, Wydział Technologii Chemicznej, ul. Berdychowo 4, Poznań. Email: katarzyna.staszak@put.poznan.pl

Prerequisites

Fundamental knowledge realted to computers and their importance for human society.

Course objective

To familiarize students with the specifics of computers. To indicate the width of areas of use of digital machines in the scientific, design and engineering environment, as well as in the area of functioning of society. Special sensitisation of students to a number of non-intuitive phenomena occurring during design, numerical or simulation calculations. The subject is profiled from a technical point of view, with particular emphasis on the application of digital tools in the field of chemical technology and engineering.

Course-related learning outcomes

Knowledge

The effect of teaching this subject is the knowledge of the advantages and limitations of using

computer-aided techniques. Special emphasis is placed on the knowledge of the realities of computer-aided design and the characteristics of conducting simulation calculations (K_W01).

Skills

Ability to use Office (K_U02).

Social competences

The student is aware of the importance of digital devices for human society. Particular emphasis is placed on the impact of digital machines on the quality and efficiency of desktop publishing and editing tasks, with particular emphasis on the chemical technology environment (K_K02).

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Ongoing check of the degree of mastery of the material on colloquia.

Programme content

Word: Formatting tables and text, using automatic (active) endnotes, signatures, references. Writing using styles (Heading 1, 2...), generating tables of contents and writing individual chapters in separate files and then their composition into one document.

Excel: Formatting text, calculations with formulas, statistical elements, graphs.

PowerPoint: In the form of homework, preparation of presentations, presentation during classes.

Chemsketch: Software for drawing chemical formulas.

Teaching methods

Presentation of the functioning of applied tools, current exercises performed by students in computer laboratories.

Bibliography

Basic

Office 2010: praktyczny kurs: PowerPoint 2010, Word 2010, Excel 2010, Access 2010 / Alicja Żarowska-Mazur, Waldemar Węglarz. Autor: Żarowska-Mazur, Alicja, Węglarz, Waldemar. Wydawnictwo Naukowe PWN, 2012.

Additional

Microsoft Office 2007 PL w biurze i nie tylko / Piotr Wróblewski. Autor: Wróblewski, Piotr (informatyka). "Helion", 2007.

Breakdown of average student's workload

	Hours	ECTS
Total workload	75	3,0
Classes requiring direct contact with the teacher	38	1,5
Student's own work (literature studies, preparation for projects and realization of them. [1]	37	1,5

[1] delete or add other activities as appropriate