



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Information technology (Advanced course)

Course

Field of study

Chemical and process engineering

Area of study (specialization)

Level of study

First-cycle studies

Form of study

full-time

Year/Semester

1/1

Profile of study

general academic

Course offered in

Polish

Requirements

elective

Number of hours

Lecture

Laboratory classes

Other (e.g. online)

Tutorials

Projects/seminars

30

Number of credit points

2

Lecturers

Responsible for the course/lecturer:

dr inż. Maciej Staszak

Responsible for the course/lecturer:

Prerequisites

Fundamental knowledge related 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_W15)



Skills

Ability to use Office. (K_U06)

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	60	2,0
Classes requiring direct contact with the teacher	45	1,0
Student's own work (literature studies, preparation for tests, project preparation) ¹	15	1,0

¹ delete or add other activities as appropriate