GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Information technologies, PG_00060836		
Field of study	Chemical Technology		
Date of commencement of studies	October 2024	Academic year of realisation of subject	2024/2025
Education level	first-cycle studies	Subject group	Obligatory subject group in the field of study
Mode of study	Full-time studies	Mode of delivery	at the university
Year of study	1	Language of instruction	Polish
Semester of study	1	ECTS credits	2.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Department of Physical Chemistry -> Faculty of Chemistry		
Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. inż. Adam Kloskowski	
	Teachers		

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	0.0	0.0	15.0	0.0	0.0	15

E-learning hours included: 0.0

Learning activity and number of study hours

Learning activity	Participation in didactic classes included in study plan	Participation in consultation hours	Self-study	SUM
Number of study hours	15	5.0	30.0	50

Subject objectives

The aim of the course is also for the student to acquire the ability to use information technology tools to support his/her learning and work organization. During the classes, the basics of IT techniques, text processing, spreadsheets and tools dedicated to chemical sciences will be presented

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K6_K05] is aware of the social role of a technical university graduate, and in particular understands the need to formulate and communicate to the public, in particular through the mass media, information and opinions on the achievements of technology and other aspects of engineering activity	The student is able to prepare and present a project presentation using appropriately selected computer programs. The student has the ability to analyze information in the context of the impact of decisions made on the environment. Is aware of the responsibility for the decisions made. He is able to work in a group and individually and is aware of the need to meet deadlines.	[SK3] Assessment of ability to organize work [SK5] Assessment of ability to solve problems that arise in practice [SK2] Assessment of progress of work
[K6_W06] has knowledge of information technology and computer-aided design, the use of databases in technological design	After completing the course, the student should: 1) be fluent in using advanced functions of MS Office programs (Word, Excel). 2) Use a spreadsheet to solve data analysis problems.	[SW3] Assessment of knowledge contained in written work and projects

Subject contents

The program content is implemented in the form of laboratory classes

The laboratory program is divided into three thematic blocks:

BLOCK 1. Creating documents using MS Word, editing mathematical formulas,

BLOCK 2. Support for chemical formula editors (ISIS, Biovia Draw)

BLOCK 3. Using the MS Excel spreadsheet for chemical calculations and data analysis and presentation

<table>
<tr><td>Prerequisites and co-requisites</td><td colspan="3"></td></tr>
<tr><td>Assessment methods and criteria</td><td colspan="3"><table><tr><th>Subject passing criteria</th><th>Passing threshold</th><th>Percentage of the final grade</th></tr><tr><td>test</td><td>50.0%</td><td>100.0%</td></tr></table></td></tr>
<tr><td rowspan="3">Recommended reading</td><td>Basic literature</td><td colspan="2">W. Sikorski : Podstawy technik informacyjnych , PWN 2004

D. Hawley, R. Hawley, 100 sposobów na Excel 2007 PL. Tworzenie funkcjonalnych arkuszy, Helion, Warszawa 2008</td></tr>
<tr><td>Supplementary literature</td><td colspan="2">J. Czermiński i inni, Metody statystyczne dla chemików, PWN, Warszawa 1986</td></tr>
<tr><td>eResources addresses</td><td colspan="2">Adresy na platformie eNauczanie:</td></tr>
<tr><td>Example issues/ example questions/ tasks being completed</td><td colspan="3">https://enauczanie.pg.edu.pl/moodle/course/view.php?id=30198</td></tr>
<tr><td>Work placement</td><td colspan="3">Not applicable</td></tr>
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