GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Spreadsheets, PG_00044129		
Field of study	Mathematics		
Date of commencement of studies	October 2021	Academic year of realisation of subject	2022/2023
Education level	first-cycle studies	Subject group	Optional subject group Subject group related to scientific research in the field of study
Mode of study	Full-time studies	Mode of delivery	at the university
Year of study	2	Language of instruction	Polish
Semester of study	4	ECTS credits	4.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Faculty of Applied Physics and Mathematics		
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Anna Szafrańska	
	Teachers	dr inż. Anna Szafrańska	

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	30.0	0.0	15.0	15.0	0.0	60

E-learning hours included: 0.0

Additional information:
E-Learning course (lecture, laboratory, project):
https://enauczanie.pg.edu.pl/moodle/course/view.php?id=29021

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	60	5.0	35.0	100

Subject objectives

In the course, students will learn (theoretically and practically) about advanced functions of spreadsheets (Excel 2016) with particular emphasis on the VBA language.

Learning outcomes

Course outcome	Subject outcome	Method of verification
K6_U10	The student can use advanced functions in Excel and program in VBA (Visual Basic for Applications).	[SU4] Assessment of ability to use methods and tools [SU1] Assessment of task fulfilment
K6_W08	The student uses advanced tools available in Excel. Can use VBA to analyze data.	[SW1] Assessment of factual knowledge
K6_U12	The student analyzes the data using statistical functions available in Excel.	[SU1] Assessment of task fulfilment [SU4] Assessment of ability to use methods and tools

Subject contents

Spreadsheet History. Data types and cell formatting. Data visualization (conditional formatting, sorting, subtotals, charts). Pivot tables and charts. Data analysis in a spreadsheet (including mathematical and statistical functions). Macros. Cooperation with databases.

Prerequisites and co-requisites

Knowledge of the basics of Excel from the subject of Information Technologies.

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
project	50.0%	40.0%
laboratory	50.0%	40.0%
test (theory)	50.0%	20.0%

Recommended reading

Basic literature

John Walkenbach, Excel 2016 PL. Biblia, Helion, Gliwice 2016

Michael Alexander, Richard Kusleika, Excel 2016 PL. Programowanie w VBA. Vademecum Walkenbacha, Helion, Gliwice 2017

	Supplementary literature	Piotr Walędziak, Excel. Nauka na przykładach, 2018
	eResources addresses	Podstawowe https://enauczanie.pg.edu.pl/moodle/course/view.php?id=29021 - E-Learning course (lecture, laboratory, project): Adresy na platformie eNauczanie:
Example issues/ example questions/ tasks being completed	Sort the table in multiple levels. Use conditional formatting to highlight certain table elements. Draw and format a chart.	
Work placement	Not applicable	