



Subject card

Subject name and code	COMPUTER SCIENCE IN MANAGEMENT, PG_00061328						
Field of study	Engineering Management						
Date of commencement of studies	October 2023	Academic year of realisation of subject			2023/2024		
Education level	first-cycle studies	Subject group			Obligatory subject group in the field of study 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	1	Language of instruction			Polish		
Semester of study	2	ECTS credits			4.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Department of Informatics in Management -> Faculty of Management and Economics						
Name and surname of lecturer (lecturers)	Subject supervisor	dr Anna Baj-Rogowska					
	Teachers	dr Anna Baj-Rogowska mgr Jaromir Durkiewicz					
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	45.0	0.0	0.0	45
	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	45	3.0		52.0	100	
Subject objectives	Acquiring practical skills in analyzing and managing business data. Support for solving economic problems using IT. Identification of sources of reliable information thanks to their advanced analysis and use of the results to evaluate and support management processes.						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	[K6_U07] applies information technology to improve critical analysis and evaluation of data and management processes	creates useful applications using the MS Office package, improving critical analysis and evaluation of management processes			[SU2] Assessment of ability to analyse information		
	[K6_W03] identifies reliable sources of information relevant to the analyzed issues	solves advanced problems by selecting reliable data relevant to the subject under study			[SW1] Assessment of factual knowledge		
Subject contents	Streamlining business tasks with the use of the Excel application Basic data operations (importing external data, sorting and filtering operations) Functions (mainly math, text, statistics, etc.). Nesting functions Advanced data processing using functions Macros Building applications in MS Excel Solving optimization problems using Solver						
Prerequisites and co-requisites							
Assessment methods and criteria	Subject passing criteria	Passing threshold			Percentage of the final grade		
	Excel skills test	60.0%			60.0%		
	Solver skills test	60.0%			40.0%		

Recommended reading	Basic literature	<p>1. M. Alexander, R. Kusleika, J. Walkenbach, Excel 2019 PL. Biblia, Wydawnictwo Helion, 2021.</p> <p>2. J. Walkenbach, M. Alexander, Analiza i prezentacja danych w Microsoft Excel. Vademecum Walkenbacha, Wydawnictwo Helion, 2021.</p> <p>3. B. Jelen, Excel 2021 i Microsoft 365. Przetwarzanie danych za pomocą tabel przestawnych, Wydawnictwo Promise, 2022.</p> <p>4. A. Baj-Rogowska, Decyzje optymalne z Solverem, Wydawnictwo Politechniki Gdańskiej, Gdańsk, 2020.</p> <p>5. H. Tyszka, Excel Solver w praktyce. Zadania ekonometryczne z rozwiązaniami, Wyd. Helion, 2021.</p>
	Supplementary literature	none
	eResources addresses	Adresy na platformie eNauczanie: Informatyka w zarządzaniu - ZI st. stacjonarne, lato 2024 - Moodle ID: 24009 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=24009
Example issues/ example questions/ tasks being completed	Automation of spreadsheet activities Optimization of business decisions	
Work placement	Not applicable	