



## Subject card

Subject name and code	COMPUTER SCIENCE IN MANAGEMENT, PG_00061446						
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	Part-time studies (on-line)	Mode of delivery			blended-learning		
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 inż. Anna Trzaskowska					
	Teachers	dr inż. Anna Trzaskowska					
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	24.0	0.0	0.0	24
	E-learning hours included: 20.0						
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	24	3.0		73.0		100
Subject objectives	Business data analysis and visualization - identifying sources of reliable data, analyzing and visualizing them, and using 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	Uses known methods and tools to critically analyze and evaluate management processes. Presents the results of his work.			[SU1] Assessment of task fulfilment [SU2] Assessment of ability to analyse information [SU3] Assessment of ability to use knowledge gained from the subject [SU4] Assessment of ability to use methods and tools [SU5] Assessment of ability to present the results of task		
	[K6_W03] identifies reliable sources of information relevant to the analyzed issues	Analyzes data and information from various sources.			[SW1] Assessment of factual knowledge [SW2] Assessment of knowledge contained in presentation [SW3] Assessment of knowledge contained in written work and projects		

Subject contents	<p>Data acquisition.</p> <p>Excel Power Query and Power BI as a tool for data analysis and visualization.</p> <p>Gaining a competitive advantage through the use of methods business analytics.</p>		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	practical exercises	60.0%	50.0%
	mini project	60.0%	50.0%
Recommended reading	Basic literature	<p>Radziszewski P., Business Intelligence, Poltex, Warszawa, 2016</p> <p>Surma J., Business Intelligence, PWN, Warszawa, 2018</p> <p>Surma J, Cyfryzacja życia w erze Big Data, PWN, Warszawa, 2017</p>	
	Supplementary literature	Own materials for laboratories	
	eResources addresses	<p>Adresy na platformie eNauczenie:</p> <p>Informatyka w Zarządzaniu - NSTAC online - 2023/2024 - Moodle ID: 36384</p> <p><a href="https://enauczenie.pg.edu.pl/moodle/course/view.php?id=36384">https://enauczenie.pg.edu.pl/moodle/course/view.php?id=36384</a></p>	
Example issues/ example questions/ tasks being completed	<p>Introduction to Power BI.</p> <p>Data import.</p> <p>Working with data in Power Query.</p> <p>Creating relations.</p> <p>Reports.</p> <p>DAX functions.</p>		
Work placement	Not applicable		