GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Data Warehousing, PG_00047712						
Field of study	Informatics						
Date of commencement of studies	October 2022		Academic year of realisation of subject		2022/2023		
Education level	second-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		Mode of delivery		blended-learning		
Year of study	1		Language of instruction		Polish		
Semester of study	1		ECTS credits		6.0		
Learning profile	general academic profile		Assessment form		exam		
Conducting unit	Department of Software Engineering -> Faculty of Electronics, Telecommunications and Informatics						
Name and surname of lecturer (lecturers)	Subject supervisor		dr inż. Teresa Zawadzka				
	Teachers		dr inż. Teresa Zawadzka				
			dr inż. Grzegorz Gołaszewski				

Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	12.0	0.0	12.0	12.0	0.0	36
	E-learning hours included: 24.0						

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	36	10.0	104.0	150

Subject objectives	The objective of the subject is to learn student on basic issues of business intelligence, in particular on design and implementation of a data warehaouse and how to use some selected business intelligence tools.

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K7_U03] can design, according to required specifications, and make a complex device, facility, system or carry out a process, specific to the field of study, using suitable methods, techniques, tools and materials, following engineering standards and norms, applying technologies specific to the field of study and experience gained in the professional engineering environment	Student can design a data warehouse.	[SU1] Assessment of task fulfilment
	[K7_U09] can carry out a critical analysis of the functioning of existing technical solutions and assess these solutions, as well as apply experience related to the maintenance of advanced technical systems, devices and facilities typical for the field of studies, gained in the professional engineering environment	Student can evaluate data warehouse efficiency and optymized its working.	[SU1] Assessment of task fulfilment
	[K7_W42] Knows and understands, to an increased extent, the principles and trends in the analysis and design of local and distributed IT systems and the basics of computer modeling and computerization of complex cognitive and decision-making processes.	Student knows data warehouse design principles.	[SW1] Assessment of factual knowledge
	[K7_W41] Knows and understands, to an increased extent, the standards, production methods, life cycle and development trends of software as well as information systems and applications.	Student can describe the simplest methodology of BI system development.	[SW1] Assessment of factual knowledge

Subject contents	Data warehouse implementation, from requirement to dashboards: project, implementation, optimalization, dashboards.
Prerequisites and co-requisites	basic database course

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Midterm quizies	50.0%	20.0%
	Written exam	50.0%	40.0%
	Project	50.0%	40.0%

Recommended reading	Basic literature	P. Ponniah: Data Warehousing. J. Wiley&Sons, 2001. K. Goczyła. "Hurtownie danych". Materiały do wykładu. Gdańsk 2009. V. Poe, P. Klauer, S. Brebst: Tworzenie hurtowni danych, WNT 2000
	Supplementary literature	W.H. Inmon: Building the Data Warehouse. J. Wiley&Sons, 2002. R. Kimball: Data Warehouse Toolkit. J. Wiley&Sons, 1996.
	eResources addresses	Adresy na platformie eNauczanie: Data Warehouses - Part-time studies - 2022/2023 - Moodle ID: 25292 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=25292

Example issues/ example questions/ tasks being completed	1. What is OLAP? 2. Design a logical model of a data warehouse
Work placement	Not applicable