



Subject card

Subject name and code	DATABASES, PG_00070833						
Field of study	Economic Analytics						
Date of commencement of studies	October 2026	Academic year of realisation of subject				2027/2028	
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	2	Language of instruction				Polish	
Semester of study	3	ECTS credits				4.0	
Learning profile	general academic profile	Assessment form				assessment	
Conducting unit	Department of Informatics In Management -> Faculty of Management and Economics -> Faculties of Gdańsk University of Technology						
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Anna Trzaskowska					
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	45.0	0.0	0.0	60
	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	60	3.0	37.0	100		
Subject objectives	preparing students to independently design and implement simple relational databases based on knowledge of information modeling, principles of operation of database management systems and SQL language, and shaping attitudes related to the responsible and conscious use of data in the context of information management.						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	[K6_U07] uses advanced information technologies to enhance data analysis and decision-making processes.	is able to implement relational databases using tools such as MS Access, applying SQL to analyze and process data in accordance with user requirements; is prepared to responsibly design and document data structures, particularly through collaboration in project teams and critical reflection on the quality and reliability of processed information.			[SU1] Assessment of task fulfilment [SU4] Assessment of ability to use methods and tools		
	[K6_W02] possesses advanced knowledge of methods and techniques that enable precise formulation and effective problem solving.	has knowledge and understanding of the principles of designing relational databases in the context of developing information models for management systems.			[SW3] Assessment of knowledge contained in written work and projects		
Subject contents	Course content – lecture						
	<ol style="list-style-type: none"> The essence, types of databases. Elements of database construction. Data models and data integrity. Database management systems - DBMS. Database Design. ERD - Entity Relationship Diagram. SQL - Structured Query Language. 						
Course content – laboratory							
<ol style="list-style-type: none"> Getting to know MS Access Creating tables, relations, queries (selecting and functional) Creating forms and reports. SQL language. Designing databases as elements of management information systems in the enterprise. 							

Prerequisites and co-requisites	Knowledge of the MS Office environment.		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Practical tasks	60.0%	40.0%
	Test of knowledge and understanding in the form of a quiz	60.0%	20.0%
	Team technical database project	60.0%	30.0%
	Development of a data model concept	60.0%	10.0%
Recommended reading	Basic literature	<ol style="list-style-type: none"> 1. Michael J. Hernandez - Projektowanie baz danych dla każdego. Przewodnik krok po kroku. Helion, Gliwice 2022. 2. Michael Alexander, Richard Kusleika - Microsoft Access 2019 PL Biblia. Kompletny Przewodnik. Helion, Gliwice 2019. 	
	Supplementary literature	Own materials for classes.	
	eResources addresses		
Example issues/ example questions/ tasks being completed	Create relationships between tables using primary keys. Show the differences between the update query and the crosstab query. What do we use forms for and what do we use reports in Access? Export the report to a pdf file. Design a database for a sample enterprise based on the collected requirements, taking into account the identified constraints.		
Practical activities within the subject	Not applicable		

Document generated electronically. Does not require a seal or signature.