



Subject card

Subject name and code	Databases, PG_00037126						
Field of study	Economic Analytics						
Date of commencement of studies	October 2020	Academic year of realisation of subject			2021/2022		
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			blended-learning		
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						
Name and surname of lecturer (lecturers)	Subject supervisor	mgr inż. Leszek Zięba					
	Teachers	mgr inż. Leszek Zięba					
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	30.0	0.0	0.0	45
	E-learning hours included: 15.0						
Bazy danych ST2021Z - Moodle ID: 13096 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=13096							
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	7.0	48.0	100		
Subject objectives	Understanding the basic theoretical and practical principles for creating databases						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	[K6_W09] Knows the ways and tools of acquiring and collecting data, including IT data, used in the analysis and explanation of socio-economic phenomena and processes.	The student knows the principles of requirements modeling and design system			[SW1] Assessment of factual knowledge		
	[K6_U08] Has the ability to use mathematical and IT tools to analyse economic phenomena and make decisions by economic entities.	The student learns the RDBMS environment and database management methods			[SU4] Assessment of ability to use methods and tools [SU1] Assessment of task fulfilment		
	[K6_K03] Can assess the importance of criteria and tasks in the projects implemented.	The student can to implement a database based on defined requirements			[SK5] Assessment of ability to solve problems that arise in practice		
Subject contents	LECTURES and LABORATORIES Designing an information system. Place the design in the life cycle of the system. The methodology for designing and modeling. Designing databases as part of management information systems. Engineering requirements. Identification of processes and functions (analysis of function). The logical process model. Modeling the flow of information. Data modeling. The logical data model based on "case study." Optimizing data model. The physical data model. Modeling Interface. Projektowania.Logiczny process model stages. Modeling the flow of information. Modeling data. The logical data model based on "case study". Optimizing data model. The physical data model. Using CASE tools, database schema generation. RDBMS MS SQL Server use to create databases. Design of input and output. Advanced SQL (structured query language) used for creating, modifying databases, and to place and retrieve data from databases.						
Prerequisites and co-requisites							
Assessment methods and criteria	Subject passing criteria	Passing threshold			Percentage of the final grade		
	Practical exercise	80.0%			30.0%		
	Final test	75.0%			10.0%		
	Project	60.0%			60.0%		

Recommended reading	Basic literature	1.D. Mendrala, M. Szeliga, Serwer SQL2005Express, Helion 2008, 2.D. Mendrala, M. Szeliga, Microsoft SQL Server Modelowanie i eksploracja danych, Helion 2012, 3.E.Johanson,J.Jones,Modelowanie danych w SQL Server 2005 I 2008,Helion 2009, 4.I.Ben_Gan,Microsoft SQL Server 2012.Podstawy Języka T_SQL,APN Promise 2012, 5. D. Petkovic,Microsoft® SQL Server® 2012: A Beginner's Guide, Fifth EditionMcGraw-Hill2012
	Supplementary literature	Yourdon E.: Współczesna analiza strukturalna, WNT, Warszawa 1996.
	eResources addresses	
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	