

Subject card

Subject name and code	Data Warehouses in Management, PG_00171472						
Field of study	Economics						
Date of commencement of studies	October 2025		Academic year of realisation of subject		2025/2026		
Education level	Master's studies		Subject group		Obligatory subject group in the field of study Specialty subject group		
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		2.0		
Learning profile	academic		Assessment form				
Conducting unit	Division of Electronic Economy -> Department of Maritime Transport and Seaborne Trade -> Faculty of Economics -> Rector						
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. Jacek Winiarski				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	15.0	0.0	0.0	0.0	15
	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	15		10.0		25.0	50
Subject objectives	The aim of the exercises is the practical application of the knowledge acquired during lectures. Students will be involved in the design and implementation of data warehouses. The exercises are aimed at developing technical and analytical skills.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[EKONMU2_K04] is ready to think and act in an entrepreneurial manner; adapts to new situations and conditions; undertakes challenges of creative thinking; acquires resilience to failures; can assess risks and threats and find ways of counteracting their effects	The student thinks and acts entrepreneurially, adapting to a changing technological environment, approaching data warehouse-based analytical solutions creatively, and minimizing implementation risks.	[SK5] implementation of a problem task
	[EKONMU2_W07] has an in-depth knowledge of economic and financial principles governing the functioning and management of economic entities and organisations, as well as of systems of legal, organisational, professional, moral and ethical norms and rules organising public structures and institutions, both in the national and international spheres	The student has in-depth knowledge of the economic and financial principles of managing economic entities and of the normative regulations organizing structures and processes in which data warehouses support decision-making at national and international levels.	[SW4] test/exam - oral or written
	[EKONMU2_U15] can independently expand and improve acquired knowledge and skills in economics; is open to new ideas and techniques; tends to learn using any accessible method and to interact with other participants of the learning process	Students will acquire basic skills in SQL and building data warehouses.	[SU5] implementation of a problem task
	[EKONMU2_U14] can appropriately identify priorities and plan and organise tasks related to their implementation, as well as monitor and assess progress	The student can plan, organize, and monitor activities related to designing and using data warehouses in organizational management.	[SU5] implementation of a problem task
	[EKONMU2_U13] can manage teamwork as well as interact and work in a team (including in an international environment) assuming a leading role in it	The student is able to lead a project team working on data warehouse tasks, including in an international environment.	[SU5] implementation of a problem task
	[EKONMU2_K05] correctly identifies, diagnoses and solves dilemmas and alternative solutions related to the profession	The student is able to identify and resolve professional dilemmas related to data analysis and the implementation of data warehouse solutions in management.	[SK5] implementation of a problem task
	[EKONMU2_W11] knows the detailed principles of establishing and developing forms of individual entrepreneurship, using the knowledge of economics, finance and management sciences	The student knows the principles of using data warehouses to support entrepreneurship and data-driven decision-making in business activities.	[SW4] test/exam - oral or written
	[EKONMU2_W08] has an in-depth knowledge of processes occurring in enterprises and economic organisations and with related areas, as well as of processes of change in public institutions; knows methods of research on the regularities governing these changes, taking into account the influence of external stakeholders on them	The student has in-depth knowledge of processes taking place in economic organizations, with particular emphasis on the role of data warehouses in analysis and managerial decision-making, taking into account the influence of external stakeholders.	[SW4] test/exam - oral or written
	[EKONMU2_W02] has an in-depth knowledge of various types of existing economic entities and organisations as well as an extended knowledge of public institutions	The student has in-depth knowledge of various types of economic organizations and public institutions, as well as the use of data warehouses in their functioning and managerial process analysis.	[SW4] test/exam - oral or written

Subject contents	1. Creating tables 2. Table changes and updates 3. ER diagrams and relational diagrams 4. Connecting tables 5. Creating raports To further develop the concepts discussed during the lectures, students may take advantage of consultation hours.		
Prerequisites and co-requisites	To participate in the exercises it is required to have basic computer skills. Students should be proficient in using operating systems, word processing tools, spreadsheets and have the ability to effectively search for information on the Internet. This knowledge is necessary to perform practical tasks and analyze cases during exercises.		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Test	51.0%	100.0%
Recommended reading	Basic literature	Kimball, R., Ross, M., The Data Warehouse Toolkit: The Definitive Guide to Dimensional Modeling, Wiley, Indianapolis, 2013. Inmon, W. H., Building the Data Warehouse, Wiley, Hoboken, 2005. Behrendt, M., Adamson, R., et al., Architecting the Cloud: Design Decisions for Cloud Computing Service Models (SaaS, PaaS, and IaaS), Wiley, Indianapolis, 2013.	
	Supplementary literature	Hughes, R., Agile Data Warehousing for the Enterprise: A Guide for Solution Architects and Project Leaders, Addison-Wesley Professional, 2015. Collier, K., Agile Analytics: A Value-Driven Approach to Business Intelligence and Data Warehousing, Addison-Wesley Professional, 2011. Bhatia, P., Data Mining and Data Warehousing: Principles and Practical Techniques, Cambridge University Press, 2019.	
	eResources addresses	Adresy na platformie eNauczanie:	
Example issues/ example questions/ tasks being completed			
Work placement	Not applicable		

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