



Subject card

Subject name and code	Management of geoinformation projects, PG_00069058						
Field of study	Geodesy and Cartography						
Date of commencement of studies	February 2026		Academic year of realisation of subject		2026/2027		
Education level	second-cycle studies		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		3.0		
Learning profile	general academic profile		Assessment form		assessment		
Conducting unit	Department of Geodesy -> Faculty of Civil and Environmental Engineering -> Faculties of Gdańsk University of Technology						
Name and surname of lecturer (lecturers)	Subject supervisor		dr inż. Katarzyna Bobkowska				
	Teachers						
Lesson types	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: 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	45		0.0		0.0	45
Subject objectives	1. Introducing students to the basics of project management. 2. Introducing students to the scope of the GIS project. 3. Introducing students to the stages of the GIS planning methodology.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[K7_U06] creates solutions to complex and unstructured problems taking into account the variability of the environment by synthesising information from different sources, using analytical and simulation methods		Is able to plan, develop, and present a geoinformatics project, taking into account needs analysis, schedule, risks, and implementation efficiency.		[SU5] Assessment of ability to present the results of task		
	[K7_W05] has a well-established knowledge of analytical methods and surveying techniques necessary for creating and solving a variety of problems in geodesy and cartography		Has knowledge of methods and tools used in geoinformatics project management, including planning, risk assessment, and implementation of tasks in the GIS environment.		[SW1] Assessment of factual knowledge		
Subject contents	Course content – lecture						
	• Basic concepts and significance of geoinformatics project management. • Project life cycle stages of planning, implementation, monitoring, and closure. • Scope and characteristics of geoinformatics projects in administration, environmental management, and engineering. • Project organizational structure roles and responsibilities of team members. • Project planning defining objectives, schedule, resources, and budget. • Identification and analysis of risks in GIS projects. • Quality control and change management during project implementation. • Principles of communication and team management. • Overview of selected project management methodologies. • Case studies examples of geoinformatics project implementation.						
	Course content – laboratory						
	• Identification of GIS system user needs analysis of functional and business requirements. • Project planning based on conversations with a simulated stakeholder (AI) defining goals, requirements, and constraints. • SWOT and risk analysis for geoinformatics projects. • Development of project task structure and schedule (WBS, Gantt). • Time and priority management use of tools such as Kanban and Trello. • Team communication and project progress reporting. • Presentation of project results and reflection on the management process.						

Prerequisites and co-requisites	The student has basic knowledge of Geographic Information Systems (GIS) and understands the importance of spatial data in engineering and decision-making processes.		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Test	60.0%	70.0%
	Reports	80.0%	30.0%
Recommended reading	Basic literature	• Tomlinson R., <i>Zarządzanie projektami GIS</i>, Wydawnictwo ESRI Press / Helion, Gliwice, 2016. • PRINCE2® Foundation, <i>Zarządzanie projektami metodyką PRINCE2</i>, AXELOS / TSO, Warszawa, 2017. • PMBOK® Guide, <i>Przewodnik po zarządzaniu projektami</i>, Project Management Institute, Warszawa, 2021. • Kerzner H., <i>Zarządzanie projektami. Kompendium wiedzy</i>, Wydawnictwo PWN, Warszawa, 2019.	
	Supplementary literature	Didactic materials and laboratory instructions available on the eNauczanie PG platform	
	eResources addresses		
Example issues/ example questions/ tasks being completed	• Scope and stages of geoinformatics project management. • Definitions of a project and project management. • Life cycle of a geoinformatics project. • Project organizational structure. • Role of the project manager and project team members. • Stakeholder analysis in a project. • Project scope and planning. • Resource planning and project scheduling. • Risk management in GIS projects. • Communication within the project team. • Monitoring and evaluation of project progress. • Case studies examples of geoinformatics projects.		
Practical activities within the subject	Not applicable		

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