



Subject card

Subject name and code	PROJECT MANAGEMENT, PG_00039318						
Field of study	Environmental Engineering						
Date of commencement of studies	October 2024	Academic year of realisation of subject			2024/2025		
Education level	second-cycle studies	Subject group			Humanistic-social subject group		
Mode of study	Full-time studies	Mode of delivery			at the university		
Year of study	1	Language of instruction			English		
Semester of study	1	ECTS credits			3.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Department of Industrial Management -> Faculty of Management and Economics						
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. inż. Marek Wirkus				
	Teachers						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	30.0	15.0	0.0	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		5.0		25.0	75
Subject objectives	The course broadens students understanding of project and project management; students will be able to apply basic tools and techniques of project management in practice; write a sponsor and project requirements definition; construct a comprehensive project schedule; evaluate a project plan subject to time, cost and resource constraints. Also The course develops the fundamental skills required of all project managers from both a theoretical and practical viewpoint.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K7_W71] has general knowledge in humanistic, social, economic or legal sciences, including their fundamentals and applications	Student will be able to use theoretical knowledge to solve some problems in the implementation of the project	[SW3] Assessment of knowledge contained in written work and projects
	[K7_W03] has in-depth, structured and theoretical knowledge related to the environmental chemistry, environmental management and monitoring, or the technology and organization of installation works or measurements in environmental engineering	The student will have the ability to determine the priorities for the implementation of individual and team tasks in the upcoming project	[SW3] Assessment of knowledge contained in written work and projects
	[K7_U04] is able to prepare and present a presentation on the implementation of a design or research task and to conduct a discussion on the presentation	Student will be able to use teamwork techniques to work on the project	[SU1] Assessment of task fulfilment
	[K7_W02] has broadened and well-ordered knowledge of the current law on construction, water, environmental protection and planning and spatial planning.	The student will have the ability to work in teams, international ones, taking them different roles of leadership	[SW1] Assessment of factual knowledge
[K7_U14] can technically and economically analyze and evaluate the solutions and functioning of facilities and systems in the sanitary engineering or flood protection, water intakes and water infrastructure or water and wastewater treatment plants; can assess the suitability and potential of using new achievements in materials, fixtures, devices and methodologies for designing and modeling the analyzed technical infrastructure and industrial objects, including innovative solutions	Student will be able to use theoretical knowledge to design solutions for the management of the resources necessary to implement the project	[SU2] Assessment of ability to analyse information [SU1] Assessment of task fulfilment	
Subject contents	Definition of a project; project characteristics; classification of projects; meaning and scope of projects and project management; project life cycles; project processes, the roles of the project manager, scope management, building a work break structure, stakeholders management; stakeholders roles; responsibility matrix; time planning the process; activity identification; identify activity relationships; estimating; creating a network; activity on arrow diagram and critical path analysis; activity-on-node diagrams; estimating project time; effective time management; scheduling - Gantt charts; assign and level resources; Program Evaluation Review Techniques (PERT); cost planning process; cost estimating techniques; cost build-up; cost management budgets; risk management; identify the risk; risk quantification techniques; how to reduce the risk;		
Prerequisites and co-requisites	no prerequisites		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	final test (multiple choice)	60.0%	50.0%
	group project	60.0%	50.0%
Recommended reading	Basic literature	<p>1.A Guide to the Project Management Body of Knowledge (PMBOK® Guide) -Fifth Ed. by Project Management Institute; 2013/17</p> <p>2.Gray C.E. and Larson E.W., Project management: the managerial process, McGraw- Hill, edition 4e, 2007</p> <p>3.Individual Competence Baseline for Project; ver. 4.0. International Project Management Association; 2015</p> <p>4.Lockyer K. and Gordon J., Project management and project network techniques, Financial Times Prentice Hall, 7th edition, 2005</p> <p>5.Kerzner H., Project management: A systems approach to planning, scheduling and controlling, John Wiley & Sons, 10th edition, 2009</p> <p>6.Managing Successful Projects with PRINCE2; Office of Government Commerce. Edition 2009/17 .</p>	

	Supplementary literature	Verzuh E., The Fast Forward MBA In Project Management, Wiley 2nd edition, 2005.
	eResources addresses	Adresy na platformie eNauczenie:
Example issues/ example questions/ tasks being completed	<p>How to calculate total slack of activity:</p> <p>a) date of end minus duration time of activity</p> <p>b) date of earliest end minus date of latest start</p> <p>c) date of the latest end - date of the earliest start - durations of activity</p> <p>d) duration time of activity - date of the latest end</p> <p>What does network diagram show?</p> <p>a.) Relations between activities</p> <p>b.)The date of starting and finishing of our project.</p> <p>c.) Logical and timing depending on between the activities occurring in the project. Plus sequence of the activities.</p>	
Work placement	Not applicable	