



## Subject card

Subject name and code	Project and Risk Management, PG_00067976						
Field of study	Automatic Control, Cybernetics and Robotics						
Date of commencement of studies	October 2025		Academic year of realisation of subject		2027/2028		
Education level	first-cycle studies		Subject group		Obligatory subject group in the field of study Humanistic-social subject group		
Mode of study	Full-time studies		Mode of delivery		at the university		
Year of study	3		Language of instruction		Polish		
Semester of study	5		ECTS credits		2.0		
Learning profile	general academic profile		Assessment form		assessment		
Conducting unit	Department of Software Engineering -> Faculty of Electronics Telecommunications and Informatics -> Wydział Politechniki Gdańskiej						
Name and surname of lecturer (lecturers)	Subject supervisor		dr inż. Maciej Kucharski				
	Teachers		dr inż. Maciej Kucharski				
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	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		2.0		33.0	50
Subject objectives	<ul style="list-style-type: none"><li>Understanding of the purpose and the broader context of project and risk management</li><li>Gaining knowledge of the key areas of project and risk management based on the PRINCE2 and PMBoK methodologies</li><li>Learning about the tools and techniques that support project and risk management.</li></ul>						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K6_K03] is ready to meet social obligations, co-organise activities for the social environment, initiate actions for the public interest, think and act in an entrepreneurial way	The student understands the broader business context and understands the benefits that can be achieved through project and risk management	[SK5] Assessment of ability to solve problems that arise in practice
	[K6_W11] knows and understands, to an advanced extent, the general principles of setting up and development of business entities, forms of individual entrepreneurship and running ventures and the fundamental dilemmas of modern civilization and basic economic, legal and other conditions of various types of activities related to the field of study, including the basic concepts and principles in the field of industrial property and copyright protection	The student knows the basic principles of building a business case and business benefits management	[SW1] Assessment of factual knowledge
	[K6_U11] can plan and organise individual and team work	The student knows the planning techniques and is capable of organizing project teamwork	[SU4] Assessment of ability to use methods and tools
	[K6_U12] can analyze the operation of components, circuits and systems related to the field of study, as well as measure their parameters and examine technical specifications, and plan and conduct experiments related to the field of study, including computer simulations and measurements, and interpret obtained results and draw conclusions	The student is aware of the product life cycle and is capable of planning product development	[SU4] Assessment of ability to use methods and tools
Subject contents	<ol style="list-style-type: none"> <li>1. Introduction</li> <li>2. Definition of a project and project management: what is a project, what are its characteristics (temporary, unique, goal) and the context of project implementation, concepts: business change, program, project portfolio, product</li> <li>3. Project life cycle vs. software / product life cycle vs. software development cycle</li> <li>4. Project management and development process methodologies: different approaches, such as Waterfall, Agile, Scrum, PRINCE2, Lean Management, and their application in different types of projects</li> <li>5. Project definition: defining goals, scope, resources, schedule, budget, project structure, stakeholders, communication, team building</li> <li>6. Project time management: Planning levels. Setting milestones (ROADMAP), Rolling Wave Planning and building detailed schedules; Planning techniques: Gantt charts, PERT (Program Evaluation Review Technique) analysis, WBS (Work Breakdown Structure)</li> <li>7. Project quality management: setting quality standards, quality control techniques, quality risk analysis</li> <li>8. Definition of a risk and risk management, risk identification methods, risk probability assessment and impact analysis, risk management plan</li> <li>9. Project management software: popular tools and applications such as MS Project, Jira, Asana, Trello, Monday.com and others.</li> </ol>		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Written exam	51.0%	100.0%
Recommended reading	Basic literature	<ol style="list-style-type: none"> <li>1. A Guide to the Project Management Body of Knowledge (PMBok) 6th edition, Project Management Institute, 2017</li> <li>2. Axelos, Managing Successful Projects with PRINCE2® 2017 Edition, TSO, 2017</li> <li>3. OGC (Office of Government Commerce), PRINCE2® - Skuteczne zarządzanie projektami, TSO, 2010</li> <li>4. R. S. Pressman, B. R. Maxim, Software Engineering. A Practitioner's Approach, wyd. 8, McGraw-Hill Education, 2014</li> <li>5. MSF Risk Management Discipline v.1.1, Microsoft Solutions Framework Whitepaper, 2004</li> <li>6. Organizational Culture Assessment Instrument, <a href="http://www.oaionline.com">http://www.oaionline.com</a></li> <li>7. ISO Guide 73:2009 Risk management Vocabulary, ISO, 2009</li> </ol>	

	Supplementary literature	<ol style="list-style-type: none"> <li>1. Gallagher B. P., Software Acquisition Risk Management Key Process Area (KPA) A Guidebook Version 1.02, CMU/SEI-99-HB-001, Carnegie Mellon University, 1999</li> <li>2. The Standard for Portfolio Management, 2nd Edition, Project Management Institute, USA, 2008</li> <li>3. B. Hobbs, The Multi-Project PMO. A Global Analysis of Current State of Practice, PMI, 2007</li> <li>4. B. Hobbs, Report on the Survey: The Reality on Project Management Offices, PMI, 2006</li> </ol>
	eResources addresses	
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	

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