GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	, PG_00070519		
Field of study	Automation, Robotics and Control Systems		
Date of commencement of studies	October 2024	Academic year of realisation of subject	2026/2027
Education level	first-cycle studies	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	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. Dominika Wróblewska	
	Teachers		

Lesson types

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	0.0	20.0	0.0	20.0	0.0	40

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	40	0.0	0.0	40

Subject objectives

Acquisition by the student of competencies in the areas of project management, innovation in science, social innovation, and the commercialization of research results.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K6_K71] is conscious of the need to apply knowledge from humanistic, social, economic or legal sciences in order to function in a social environment	They are able to effectively popularize knowledge and present research findings, while incorporating self-presentation techniques.	[SK5] Assessment of ability to solve problems that arise in practice
[K6_U71] is able to apply knowledge from humanistic, social, economic or legal sciences in order to solve problems in a social environment	They are able to plan and execute a scientific or research-and-implementation project using teamwork methods, develop a basic business model (Business Model Canvas), and assess the market potential of research ideas.	[SU2] Assessment of ability to analyse information
[K6_W71] has general knowledge in humanistic, social, economic or legal sciences	They are familiar with the principles of writing and editing scientific texts, as well as evaluating their credibility; they are aware of sources of funding for innovation and understand the process of commercializing research results.	[SW1] Assessment of factual knowledge

Subject contents

Course content – exercises

Pragmatics of scientific writing:

Structure of scientific texts, use of scientific information sources, and the application of scholarly apparatus (citations, references, etc.) in appropriate parts of the text; evaluating the credibility of scientific sources;

Critical understanding of how one's own research findings contribute to the advancement of science.

Science popularization and self-presentation:

Principles and methods for effective self-presentation, as well as the design and use of various tools for popularizing knowledge; assessing the efficacy of different instruments and planning communication strategies;

Adapting the content and format of a message to the expectations of the audience;

Techniques for managing stage fright.

Innovation in science and social innovation:

Distinctions between basic and applied research; the process of funding innovation in Poland;

The creative process and the factors that influence it—both positively and negatively;

The importance of assessing needs, and the specific characteristics of technological versus social innovations.

Course content – project

Project Management:

Principles governing project execution and management at every stage; project monitoring techniques and methods for identifying risks; project management styles and methodologies, including their advantages, limitations, and key differences; defining project scope and objectives, and preparing preliminary documentation.

Commercialization of Research Results:

Fundamental concepts and stages of commercializing scientific research; rights derived from Intellectual Property (IP) policies; benefits and risks associated with openness versus IP protection; various legal structures used in commercialization—such as start-ups, spin-offs, spin-outs, limited liability companies (sp. z o.o.), and civil law partnerships; key activities, value propositions, and strategies for reaching and maintaining engagement with target audiences throughout the commercialization process; applying the Business Model Canvas to a business concept; and financial resources and support available for operating a start-up.

Prerequisites and co-requisites

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Project	50.0%	70.0%
Presentation	50.0%	20.0%
reflection and self-assessment	50.0%	10.0%

Recommended reading

Basic literature	1. Jabłonowska, L., Wachowiak, P., Winch, S., Professional Presentation: Theory and Practice, Difin, Warsaw, 2008. 2. Blein, B., The Art of Presentation and Public Speaking, Warsaw, 2010. 3. Rzędowska, A., Rzędowski, J., The Perfect Speaker: Public Speaking in Practice, Gliwice, 2009. 4. Żurek, E., Persuasive Presentations: Business, Media, Politics, Warsaw, 2010.
Supplementary literature	Nęcki Z., Interpersonal Communication, Wrocław, 2002 Sikorski W., Non-verbal Interpersonal Communication: Improvement through Training, Difin, Warsaw, 2011 Gierulski W., Santarek K., Commercialization and Technology Transfer, PWE, Warsaw, 2020 Report on Innovation in Poland 2021, edited by Tomasz Baczko, Institute of Economics of the Polish Academy of Sciences (PAN), Warsaw, 2021 Literature tailored to the individual substantive needs of the course participants.
eResources addresses	

Example issues/ example questions/ tasks being completed	Identify potential pathways for the commercialization of project results
Practical activites within the subject	Not applicable

Document generated electronically. Does not require a seal or signature.