GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Master's thesis, PG_00063624						
Field of study	Materials Engineering						
Date of commencement of studies	October 2024		Academic year of realisation of subject	2025/2026			
Education level	second-cycle studies		Subject group	Optional subject group Subject group related to scientific research in the field of study			
Mode of study	Full-time studies		Mode of delivery	at the university			
Year of study	2		Language of instruction	Polish			
Semester of study	4		ECTS credits	12.0			
Learning profile	general academic profile		Assessment form	assessment			
Conducting unit	Institute of Nanotechnology and Materials Engineering -> Faculty of Applied Physics and Mathematics -> Wydziały Politechniki Gdańskiej						
Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. inż. Agnieszka Witkowska					
	Teachers						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	0.0	0.0	0.0	0
	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	0		15.0	285.0	300	
Subject objectives	Preparation of the Student for undertaking and solving scientific and technical problems as well as for elaborating complete and reliable research reports. Diploma project implementation and preparation of the diploma thesis.						

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K7_U05] Can notice non-technical aspects when forming and solving design tasks, including environmental, economical and legal aspects. Applies the rules of occupational health and safety.	Student realizing a diploma project of an experimental, computational or experimental-computational nature in the field of material engineering has the necessary knowledge about the general safety rules and potential dangers and negative biological and ecological effects associated with the study and use of hazardous and toxic compounds and materials.	[SU3] Assessment of ability to use knowledge gained from the subject [SU2] Assessment of ability to analyse information
[K7_K01] Understands the need for lifelong learning, can inspire and organize the learning process of others. Is aware of own limitations and knows when to turn to experts, can accurately determine priorities helping to achieve the tasks specified by themselves or others.	The student is able to analyze the state of knowledge and conduct a discussion with the teacher and colleagues.	[SK1] Assessment of group work skills [SK4] Assessment of communication skills, including language correctness
[K7_U01] Can obtain information from literature, databases and other properly selected sources, also in English; can integrate the obtained information, interpret and draw conclusions, formulate and justify opinions	The student is able to analyze the problem defined in the diploma project and is able to prepare proposals for its solution/ realization, based on self-obtained and compiled information from literature, databases and other available sources (available mainly in English).	[SU2] Assessment of ability to analyse information
[K7_W04] Has enhanced knowledge of materials sciences, within the scope required for describing and understanding the correlation between the chemical composition, structure and mechanical and physical properties.	Student develops the ability to analyze information and interpret measurement data, can use the knowledge of materials to describe the relationship between the chemical composition, structure, and mechanical and physical properties.	[SW3] Assessment of knowledge contained in written work and projects

Subject contents

Implementation of research tasks related to the selected topic of the diploma project in the team: student-project supervisor.

Preparation of the MSc thesis manuscript in accordance with suitable standards and general guidelines.

The topic of a specific project and tasks are determined by the supervisor and can be found in the moja.pg system.

Prerequisites and co-requisites

Completed and passed all courses from semesters 1 and 2.

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Preparation and presentation of the MSc thesis	50.0%	50.0%
Realization of tasks related to the diploma project	100.0%	50.0%

Recommended reading

Basic literature	[1] Nicholas Walliman, Research Methods, The Basics, Taylor & Francis Group, London and New York, 2011 [2] Hugh G. Gauch Jr., Scientific Methods in Brief, Cambridge University Press, 2012 [3] Scientific literature and specialist reports related to the diploma project.
Supplementary literature	[1] Guidelines for Authors of diploma thesis and diploma projects for higher education studies at Gdańsk University of Technology written in polish and english. [2] Scientific literature and specialist reports related to the diploma project.
eResources addresses	

Example issues/ example questions/ tasks being completed

The issues covered as part of the MSc diploma project in a given academic year are provided by the supervisors and are available in the moja.pg system.

Work placement

Not applicable

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