GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Diploma laboratory, PG_00063533		
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	7.0
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	90.0	0.0	0.0	90

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	90	10.0	75.0	175

Subject objectives

The aim of the course is to acquire knowledge and practical skills necessary for the correct implementation of the tasks set in the master's thesis. Planning experiments, learning the principles of research methods and their practical carrying out, principles and methods of analysis of results and their presentation.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K7_W05] Knows methods, techniques, tools and materials for solving complex engineering tasks relevant to materials engineering.	The student has the skills to use the methods of study structural, mechanical and physico-chemical properties.	[SW3] Assessment of knowledge contained in written work and projects
[K7_W06] Knows the theoretical basics the functioning of scientific equipment in the fields of science and scientific disciplines relevant to materials engineering.	The student has knowledge of research techniques, construction and application of research equipment used in materials engineering.	[SW3] Assessment of knowledge contained in written work and projects
[K7_U03] Can formulate a research hypothesis, design an experiment needed to prove it and use properly selected measuring and laboratory methods.	The student has the ability to formulate research hypotheses on the design, synthesis and properties study of the materials. He can plan an experiment, describe and justify usage of physical, chemical and mechanical methods of material testing.	[SU2] Assessment of ability to analyse information [SU4] Assessment of ability to use methods and tools
[K7_U04] Can undertake a detailed analysis of the obtained results and develop a technical report or presentation, also in English.	The student has the ability to prepare research results in writing, analyze them, discuss and conclude.	[SU2] Assessment of ability to analyse information [SU5] Assessment of ability to present the results of task

Subject contents

The program includes elements of the student's individual work with the supervisor of the diploma project, as well as with a research team as part of the master's thesis subject.

Prerequisites and co-requisites

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Evaluation of the development of the research results	50.0%	100.0%

Recommended reading	Basic literature	Textbooks and publications agreed with the teacher taking care of the thesis.
	Supplementary literature	Textbooks and publications agreed with the teacher taking care of the thesis.
	eResources addresses	
Example issues/ example questions/ tasks being completed	Issues and tasks consistent with the subjects of the Master's degree projects.	
Work placement	Not applicable	

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