GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	, PG_00058951		
Field of study	Nanotechnology		
Date of commencement of studies	October 2023	Academic year of realisation of subject	2026/2027
Education level	first-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	4	Language of instruction	Polish
Semester of study	7	ECTS credits	10.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Institute of Nanotechnology and Materials Engineering -> Faculty of Applied Physics and Mathematics -> Faculties of Gdańsk University of Technology		
Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. inż. Agnieszka Witkowska	
	Teachers	dr hab. inż. Agnieszka Witkowska	

Lesson types

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	0.0	0.0	0.0	60.0	0.0	60

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	60	15.0	175.0	250

Subject objectives

The aim of the course is to complete the tasks necessary to achieve the objectives of the diploma project. These tasks may involve experimental, theoretical, experimental-theoretical, or numerical and simulation-based work.

In all cases, the student must present study results to the supervisor and submit a written form of a diploma thesis to the Gdańsk Tech electronic system.

Learning outcomes

Course outcome	Subject outcome	Method of verification
K6_U04	The student has the ability to plan and perform experiments (in physical, chemical and computer laboratories depending on the nature of the diploma project), to analyse research results, draw conclusions and conduct a critical discussion.	[SU1] Assessment of task fulfilment [SU4] Assessment of ability to use methods and tools
K6_U09	The student is able to design and synthesize using various techniques, mainly the technique to which the project is dedicated, nanostructured materials or materials containing nanosized structures.	[SU1] Assessment of task fulfilment [SU4] Assessment of ability to use methods and tools
K6_U07	The student recognizes the application and economic aspects related to the implemented engineering project. Is able to perform a preliminary economic analysis related to the engineering activities in the field of nanotechnology and the implementation of the proposed solutions.	[SU2] Assessment of ability to analyse information
K6_K05	The student has the ability to present the effects of his/her work in a clear and universally understandable way, prepare an oral presentation and conduct discussions regarding the issues studied and analyzed in the diploma project.	[SK4] Assessment of communication skills, including language correctness
K6_U02	The student knows various scientific methods (analytical, numerical, simulation and experimental – appropriate for the project being implemented) and is able to use them to solve simple scientific and technical problems, especially in the field of nanotechnology and the implemented diploma project.	[SU2] Assessment of ability to analyse information [SU4] Assessment of ability to use methods and tools

Subject contents

Course content – project

Project topics and scope of tasks are determined by the supervisor and presented in the diploma project record. Information on the topics of work for a given academic year can be found in the mojaPG system.

Prerequisites and co-requisites

Courses completed in previous semesters in accordance with the study programme and the supervisor's requirements.

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
The rating is in line with the evaluation form of diploma project	50.0%	100.0%

Recommended reading

Basic literature	Literature determined by supervisor.
Supplementary literature	Literature determined by supervisor.
eResources addresses	

Example issues/ example questions/ tasks being completed

The topics and tasks related to the subject and scope of the project are specified by the supervisors in the diploma project record published in the mojaPG system.

Practical activites within the subject

Not applicable

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