



Subject card

Subject name and code	, PG_00058951						
Field of study	Nanotechnology						
Date of commencement of studies	October 2022		Academic year of realisation of subject		2025/2026		
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 -> Wydział Politechniki Gdańskiej						
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. inż. Agnieszka Witkowska				
	Teachers		dr hab. inż. Agnieszka Witkowska				
Lesson types and methods of instruction	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 subject is to prepare an engineering diploma thesis. The work can be experimental, theoretical and computational (numerical simulations).						
	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_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.	[SU4] Assessment of ability to use methods and tools [SU1] Assessment of task fulfilment
	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.	[SU4] Assessment of ability to use methods and tools [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_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_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.	[SU4] Assessment of ability to use methods and tools [SU1] Assessment of task fulfilment
Subject contents	Project topics and scope of tasks are determined by the supervisor. Information on the topics of work for a given academic year can be found in the moja.pg system		
Prerequisites and co-requisites	Completed courses determined by the supervisor, in line with the field of study.		
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 issues are provided by the supervisor in accordance with the topic and scope of the project.		
Work placement	Not applicable		

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