

## 关。GDAŃSK UNIVERSITY 创 OF TECHNOLOGY

## Subject card

Subject name and code	, PG_00052089									
Field of study	Nanotechnology									
Date of commencement of studies	October 2020		Academic year of realisation of subject			2023/2024				
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			11.0				
Learning profile	general academic pro	ofile	Assessment form			assessment				
Conducting unit	Instytut Nanotechnologii i Inżynierii Materiałowej -> Faculty of Applied Physics and Mathematics									
Name and surname of lecturer (lecturers)	Subject supervisor dr hab. inż. Agnieszka Witkowska									
	Teachers		dr inż. Marek Augustyniak							
		dr inż. Marcin Wekwejt								
		dr hab. inż. Agnieszka Witkowska								
			dr hab. inż. Natalia Wójcik							
		dr inż. Sebastian Wachowski								
			dr hab. inż. Jacek Ryl							
			dr inż. Szymon Winczewski							
				dr inż. Magdalena Jażdżewska						
			dr hab. inż. Beata Bochentyn							
			dr hab. inż. Ryszard Barczyński							
			dr inż. Tadeusz Miruszewski							
			dr inż. Marta Prześniak-Welenc							
			dr inż. Michał Bartmański							
			prof. dr hab. inż. Maria Gazda							
Lesson types and methods	Lesson type	Lecture	Tutorial	Laboratory	Project	t	Seminar	SUM		
of instruction	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 ir classes include plan		didactic Participation in ed in study		Self-study S		SUM			
	Number of study hours	60		15.0		200.0		275		
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				
	К6_К05	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	50.0%	100.0%				
Recommended reading	Basic literature Literature determined by supervisor.						
	Supplementary literature	Literature determined by supervisor.					
	eResources addresses Adresy na platformie eNauczanie:						
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						