



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 profile	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 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		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
	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	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		