



Subject card

Subject name and code	, PG_00052088						
Field of study	Nanotechnology						
Date of commencement of studies	October 2020	Academic year of realisation of subject			2022/2023		
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	3	Language of instruction			Polish		
Semester of study	6	ECTS credits			4.0		
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. Magdalena Jażdżewska dr hab. inż. Agnieszka Witkowska dr inż. Marek Augustyniak dr inż. Marta Prześniak-Welenc					
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	0.0	45.0	0.0	45
	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	45		5.0		50.0	100
Subject objectives	The aim of the course is: 1. preparing students to complete an engineering diploma project, including: engineering and non-engineering aspects, proper and critical selection of source materials, literature review, planning and implementing the experimental or numerical-simulation part of an engineering project; 2. presenting students the diploma examination procedure and preparing them for an oral presentation of the results of the diploma project.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	K6_K05	The student has the ability to prepare and orally present the results of their work and participate in discussions, in Polish, on the issues analyzed in the discussed diploma projects. He is able to constructively evaluate his own results and the results of others.	[SK4] Assessment of communication skills, including language correctness
	K6_U07	After analyzing a simple research/technical problem (including the engineering project selected for implementation), the student is able to perform a preliminary economic analysis of planned experiments and activities aimed at solving the problem.	[SU3] Assessment of ability to use knowledge gained from the subject
	K6_U11	The student has the ability to prepare the proper structure of a scientific work and write its introductory part, and is able to prepare a professional presentation template for an oral presentation (in Polish), presenting issues from the diploma project.	[SU1] Assessment of task fulfilment [SU4] Assessment of ability to use methods and tools
	K6_U04	After getting acquainted with the research problem, the student has the ability to plan an experiment and select the appropriate experimental tools, analyse research results and conduct a critical discussion.	[SU2] Assessment of ability to analyse information
Subject contents	<p>Part 1. Writing a diploma thesis - introduction; Effective and critical search of internet resources; Literature databases: tools for searching databases and creating a reference list; Literature review related to diploma thesis.</p> <p>Part 2. Skills of conducting white intelligence; Meetings with graduates; Trip(s) to places where internships were held and/or to places potentially attractive from the point of view of professional career; Professional mentoring, CV preparation.</p> <p>Part 3. Diploma procedure; Diploma presentation: elements of the presentation, the way of presenting the content and scientific results; Preparation of a presentation template; Oral presentation training: presentation and discussion of the preliminary results of the diploma project.</p>		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Part 1. Preparation of the bibliography for the diploma thesis; Part 2. Completion of two mini-tasks; Part 3. Seminar preparation and presentation	50.0%	100.0%
Recommended reading	Basic literature	Hugh G. Gauch Jr., Scientific Methods in Brief, Cambridge University Press, 2012	
	Supplementary literature	PN-ISO 690, 2012 "Information and documentation - Guidelines of bibliographic footnotes and references to information resources"	
		Scientific literature and specialist reports related to the diploma project.	
	eResources addresses	Uzupełniająca Adresy na platformie eNauczanie:	
Example issues/ example questions/ tasks being completed	<p>Present your project/idea in the most attractive form for the "investor".</p> <p>Find the original source of requested information and determine if and what is fake news.</p> <p>White interview in practice - check the credibility and attractiveness of the selected company.</p>		
Work placement	Not applicable		