



## Subject card

Subject name and code	Team project I, PG_00059841						
Field of study	Technical Physics						
Date of commencement of studies	February 2023	Academic year of realisation of subject			2022/2023		
Education level	second-cycle studies	Subject group			Obligatory subject group in the field of study 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	1	Language of instruction			Polish		
Semester of study	1	ECTS credits			3.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Instytut Fizyki i Informatyki Stosowanej -> Faculty of Applied Physics and Mathematics						
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Marcin Dampc					
	Teachers	dr inż. Marcin Dampc					
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	0.0	30.0	0.0	30
	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	30	5.0		40.0		75
Subject objectives	The aim of the course is learning teamwork on the physics project.						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	[K7_U09] Can popularize the achievements in physics and related fields of science.	Can present the results and explain the phenomena associated the project.			[SU5] Assessment of ability to present the results of task		
	[K7_U06] Can apply obtained knowledge of physics to exact sciences, natural and technical sciences.	Is able to apply previously learned theoretical knowledge to solve the tasks set in the project			[SU1] Assessment of task fulfilment		
	[K7_W10] Knows general rules of starting and developing individual business initiatives, using knowledge of exact sciences.	Can select results with possible application in industry.			[SW1] Assessment of factual knowledge		
	[K7_K04] Can systematically work on long-term projects.	Can plan and organize project timeframe			[SK2] Assessment of progress of work		
	[K7_K03] Can cooperate and work in a group, performing different functions. Can make self-assessment, as well as constructively assess the effects of other persons' work.	Can plan and organize project timeframe. Can apply changest depending on the co-workers progress.			[SK1] Assessment of group work skills		
Subject contents	Define the principles of teamwork. Description of activities preceding the execution of the project. Discussion of the list of proposed topics Selecting the teams (2-4 students), a leader in the team and the subject of the project. Presentation of the project concept. Acceptance of the project cost estimate. Project schedule, the division of tasks and provide a framework for individual team collaboration. The evaluation of the progress of the project during its implementation and consultation on partial results. Presentation of the final results of the project.						
Prerequisites and co-requisites	Depends on the type of project						

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Presentation of the project results	50.0%	20.0%
	Division of work between the team members	50.0%	20.0%
	Partial execution of tasks	50.0%	20.0%
	Team work	50.0%	20.0%
	Originality of solutions	50.0%	20.0%
Recommended reading	Basic literature	Depends on the type of project	
	Supplementary literature	Depends on the type of project	
	eResources addresses	Adresy na platformie eNauczenie: Projekt Zespołowy 2023 - Moodle ID: 974 <a href="https://enauczenie.pg.edu.pl/moodle/course/view.php?id=974">https://enauczenie.pg.edu.pl/moodle/course/view.php?id=974</a>	
Example issues/ example questions/ tasks being completed	<ol style="list-style-type: none"> <li>1. Design, engineering and testing of the detector and data acquisition system for high resolution optical monochromator.</li> <li>2. Current-voltage characteristics and emission spectra of light-emitting diodes</li> <li>3. Photophysical properties of electron donor : electron acceptor systems applied in organic light emitting diodes.</li> </ol>		
Work placement	Not applicable		