



## Subject card

Subject name and code	Physics 2, PG_00042008						
Field of study	Power Engineering, Power Engineering, Power Engineering, Power Engineering, Power Engineering						
Date of commencement of studies	October 2020		Academic year of realisation of subject		2021/2022		
Education level	first-cycle studies		Subject group		Obligatory subject group in the field of study		
Mode of study	Full-time studies		Mode of delivery		at the university		
Year of study	2		Language of instruction		Polish polish		
Semester of study	3		ECTS credits		2.0		
Learning profile	general academic profile		Assessment form		assessment		
Conducting unit	Department of Solid State Physics -> Faculty of Applied Physics and Mathematics						
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. inż. Małgorzata Śmiałek-Telega				
	Teachers		dr inż. Joanna Grochowalska				
			mgr inż. Irena Dziwisz-Olszak				
			mgr inż. Jacek Frost				
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	30.0	0.0	0.0	30
	E-learning hours included: 0.0						
	Adresy na platformie eNauczanie: Fizyka_laboratorium_Energetyka_2021_2022 - Moodle ID: 19158 <a href="https://enauczenie.pg.edu.pl/moodle/course/view.php?id=19158">https://enauczenie.pg.edu.pl/moodle/course/view.php?id=19158</a>						
	Additional information: Coure will be run through the Moodle platform						
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		3.0		17.0	50
Subject objectives	Acquisition of practical skills in selected branches of physics, both classical and modern. Acquiring the skills of qualitative understanding of selected principles and laws of classical physics and modern and quantitative analysis of selected phenomena in this area Understanding the basic techniques and methods of measurement of selected physical						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	K6_W02				[SW3] Assessment of knowledge contained in written work and projects [SW1] Assessment of factual knowledge		
	K6_K01				[SK2] Assessment of progress of work [SK3] Assessment of ability to organize work [SK5] Assessment of ability to solve problems that arise in practice [SK4] Assessment of communication skills, including language correctness		
Subject contents	Experiments are based on kinematics, dynamics, simple harmonic motion, wave motion, acoustic, optics, electrostatics and magnetostatics.						
Prerequisites and co-requisites	Course is dedicated for students who taken high school physics and mathematics at extended level passed the exam of "Introduction to physics"						

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	All experiments must be done correctly	50.0%	100.0%
Recommended reading	Basic literature	1. D. Halliday, R. Resnick, <i>Fundamentals of Physics, Wiley, any edition</i>	
	Supplementary literature	1. M.Herman, A.Kalestyński, L.Widomski: "Podstawy fizyki dla kandydatów na wyższe uczelnie", Państwowe Wydawnictwo Naukowe.	
	eResources addresses	Fizyka_laboratorium_Energetyka_2021_2022 - Moodle ID: 19158 <a href="https://enauczanie.pg.edu.pl/moodle/course/view.php?id=19158">https://enauczanie.pg.edu.pl/moodle/course/view.php?id=19158</a>	
Example issues/ example questions/ tasks being completed	Determining the density of liquids Spring constant determination Resistance determination MEchanical waves investigations Mathematical pendulum		
Work placement	Not applicable		