GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	TECHNICAL PHYSICS, PG_00061324		
Field of study	Engineering Management		
Date of commencement of studies	October 2023	Academic year of realisation of subject	2023/2024
Education level	first-cycle studies	Subject group	Obligatory subject group in the field of study
Mode of study	Full-time studies	Mode of delivery	blended-learning
Year of study	1	Language of instruction	Polish
Semester of study	2	ECTS credits	6.0
Learning profile	general academic profile	Assessment form	exam
Conducting unit	Instytut Fizyki i Informatyki Stosowanej -> Faculty of Applied Physics and Mathematics		
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Patrycja Stefańska-Ptaszek	
	Teachers	dr inż. Patrycja Stefańska-Ptaszek	

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	30.0	0.0	30.0	0.0	0.0	60

E-learning hours included: 2.0

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	7.0	83.0	150

Subject objectives

Interprets physical phenomena in an advanced way, using properly selected analytical and empirical methods

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K6_W02] demonstrates advanced preparation in the methods and techniques of formulating and solving problems	demonstrates preparation for formulating and solving problems, based on advanced knowledge of physical phenomena	[SW1] Assessment of factual knowledge
[K6_U04] formulates logical solutions to complex or unstructured problems	formulates correct conclusions based on the analysis of complex physical phenomena	[SU3] Assessment of ability to use knowledge gained from the subject

Subject contents

Mechanics
Optics
Warm
Vibrating and wave motion
Statistical physics
Atomic physics
Nuclear physics
Quantum mechanics

Prerequisites and co-requisites

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Final exam	50.0%	65.0%
Laboratories	50.0%	35.0%

Recommended reading

Basic literature	D. Halliday, R. Resnick and J. Walker, Podtsawy fizyki, PWN tom 1-5 Feynmana Wykłady z Fiizyki, PWN Warszawa J. Orear, Fizyka, WNT, Tom 1 i 2
Supplementary literature	Paul G. Hewitt, Fizyka wokół nas, PWN Warszawa I. W. Sawieliew, Wykłady z Fizyki, PWN, Tom 1-3
eResources addresses	Adresy na platformie eNauczanie: Fizyka_Techniczna_ZiE-2024 - Moodle ID: 37495 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=37495

Example issues/ example questions/ tasks being completed	Mechanics laws
Work placement	Not applicable