GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	TECHNICAL PHYSICS, PG_00061442		
Field of study	Engineering Management		
Date of commencement of studies	October 2024	Academic year of realisation of subject	2024/2025
Education level	first-cycle studies	Subject group	Obligatory subject group in the field of study
Mode of study	Part-time studies (on-line)	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	Zakład Spektroskopii Układów Złożonych -> Instytut Fizyki i Informatyki Stosowanej -> Faculty of Applied Physics and Mathematics		
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Ewa Erdmann	
	Teachers		

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	16.0	0.0	16.0	0.0	0.0	32

E-learning hours included: 24.0

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	32	7.0	111.0	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
laboratories	50.0%	50.0%
final exam	50.0%	50.0%

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 Paul G. Hewitt, Fizyka wokół nas, PWN Warszawa I. W. Sawieliew, Wykłady z Fizyki, PWN, Tom 1-3
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:

Example issues/ example questions/ tasks being completed	The laws of classical mechanics
Work placement	Not applicable