GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	, PG_00058702		
Field of study	Materials Engineering, Materials Engineering, Materials Engineering		
Date of commencement of studies	February 2023	Academic year of realisation of subject	2023/2024
Education level	second-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	1	Language of instruction	Polish
Semester of study	2	ECTS credits	4.0
Learning profile	general academic profile	Assessment form	exam
Conducting unit	Department of Electrochemistry, Corrosion and Materials Engineering -> Faculty of Chemistry		
Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. inż. Krzysztof Żakowski	
	Teachers	dr hab. inż. Krzysztof Żakowski	

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	15.0	0.0	30.0	0.0	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

Teaching the principles of performing coating tests.
Teaching the principles of designing simple cathodic protection installations.

Learning outcomes

Course outcome	Subject outcome	Method of verification
K7_U04	The student is able to perform simple design calculations for cathodic protection installations.	[SU3] Assessment of ability to use knowledge gained from the subject
K7_W04	The student has structured knowledge of materials science.	[SW1] Assessment of factual knowledge
K7_U01	The student is able to select construction materials.	[SU2] Assessment of ability to analyse information
K7_W01	The student has extended knowledge in the field of materials engineering.	[SW1] Assessment of factual knowledge

Subject contents

Destructive and non-destructive tests of coatings.Designing a cathodic protection system for an underground pipeline.

Prerequisites and co-requisites

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
design	60.0%	50.0%
test	60.0%	50.0%

Recommended reading

Basic literature	Teaching materials of the department.
Supplementary literature	not applicable

	eResources addresses	Adresy na platformie eNauczanie: Materiały i Technologie 2 - Moodle ID: 12681 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=12681
Example issues/ example questions/ tasks being completed	Measurement of coating thickness. Ionic impurities. Climatic conditions. Calculations of the protective range of cathodic protection stations. Calculations of the pipeline's demand for cathodic protection current.	
Work placement	Not applicable	