



## Subject card

Subject name and code	, PG_00058702						
Field of study	Materials Engineering, Materials Engineering						
Date of commencement of studies	February 2024	Academic year of realisation of subject			2024/2025		
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						
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_W01		The student has extended knowledge in the field of materials engineering.		[SW1] Assessment of factual knowledge		
	K7_U01		The student is able to select construction materials.		[SU2] Assessment of ability to analyse information		
	K7_W04		The student has structured knowledge of materials science.		[SW1] Assessment of factual knowledge		
	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		
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		
	test		60.0%		50.0%		
	design		60.0%		50.0%		
Recommended reading	Basic literature		Teaching materials of the department.				
	Supplementary literature		not applicable				
	eResources addresses		Adresy na platformie eNauczanie:				

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