



Subject card

Subject name and code	Inspection of cathodic protection systems, PG_00048981						
Field of study	Corrosion						
Date of commencement of studies	February 2023	Academic year of realisation of subject			2023/2024		
Education level	second-cycle studies	Subject group			Obligatory subject group in the field of study 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	2	Language of instruction			Polish		
Semester of study	3	ECTS credits			3.0		
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	25.0	75		
Subject objectives	Mastering the basic measurement methods used during the operation of cathodic protection systems.						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	K7_W03	Student knows the methods for assessing the effectiveness of cathodic protection.			[SW1] Assessment of factual knowledge		
	K7_U02	Student is prepared for self-education in order to improve their qualifications.			[SU3] Assessment of ability to use knowledge gained from the subject		
	K7_K02	Student cooperates in a group, is able to organize work.			[SK1] Assessment of group work skills [SK3] Assessment of ability to organize work		
	K7_W02	Student knows the technologies for implementing cathodic protection of underground and underwater structures.			[SW1] Assessment of factual knowledge		
K7_U05	Student is able to evaluate the effectiveness of the cathodic protection of metal structures.			[SU2] Assessment of ability to analyse information			
Subject contents	Measurement of the ON and OFF-potential.Measurement of the output parameters of the cathodic protection station.Measurement of anode system resistance.Measurement of current flowing through the pipeline.Location of underground pipelines.Location of underground pipeline insulation defects.						
Prerequisites and co-requisites	General knowledge of electrical engineering. Basic knowledge of cathodic protection.						
Assessment methods and criteria	Subject passing criteria	Passing threshold		Percentage of the final grade			
	laboratory	60.0%		50.0%			
	test	60.0%		50.0%			
Recommended reading	Basic literature	not applicable					
	Supplementary literature	not applicable					
	eResources addresses						
Example issues/ example questions/ tasks being completed	Measurement of the OFF-potential of underground tank.Measurement of the cathodic protection current.Measurement of anode system resistance.Location of underground gas pipeline.						

Work placement	Not applicable
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