



Subject card

Subject name and code	CORROSION MONITORING, PG_00064360						
Field of study	MONITOROWANIE KOROZJI						
Date of commencement of studies	February 2026		Academic year of realisation of subject		2026/2027		
Education level	second-cycle studies		Subject group		Obligatory subject group in the field of study Specialty 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 Corrosion and Electrochemistry -> Faculty of Chemistry -> Faculties of Gdańsk University of Technology						
Name and surname of lecturer (lecturers)	Subject supervisor		prof. dr hab. inż. Juliusz Orlikowski				
	Teachers						
Lesson types	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		10.0		45.0	100
Subject objectives	The aim of the course is to present issues from corrosion monitoring and risk analysis						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[K7_K01] critically evaluates the content of scientific and practical problems		Ability to determine the applicability of individual measurement methods in the refinery industry		[SK2] Ocena postępów pracy		
	[K7_W05] recognises key developments in research, apparatus and technology in corrosion and material degradation and related fields		Market knowledge of corrosion monitoring system manufacturers		[SW1] Ocena wiedzy faktograficznej		
	[K7_U01] designs experiments using computer methods of data analysis, computer simulation and based on the state-of-the-art in knowledge of in accordance with the most recent scientific literature		Ability to use NDT methods and corrosion monitoring depending on the type of corrosion hazard		[SU1] Ocena realizacji zadania		
	[K7_U09] prepares documentation of experiments using professional terminology		Ability to understand P&D and PFD diagrams		[SU1] Ocena realizacji zadania		
Subject contents	Course content – lecture Przedstawienie budowy i funkcjonowania podstawowych instalacji rafineryjnych. Opis procesów technologicznych oraz ich wpływ na korozję. Przedstawienie technik monitorowania metodą FSM, ultradźwiękową. Analiza grupowa RBI.						
Prerequisites and co-requisites	Basic knowledge of Chemical Engineering and the basis of corrosion						
Assessment methods and criteria	Subject passing criteria		Passing threshold		Percentage of the final grade		
	Final Exam		60.0%		100.0%		
Recommended reading	Basic literature		RBI Risk Base Inspection API RBI 571, 580, 581				

	Supplementary literature	There is no requirement.
	eResources addresses	
Example issues/ example questions/ tasks being completed	Corrosion Monitoring Techniques NDT Inspection Techniques Determining the Degradation Level of Structural Materials	
Practical activities within the subject	Not applicable	

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