



## Subject card

Subject name and code	Corrosion Monitoring and NDT, PG_00048914						
Field of study	Chemistry in Construction Engineering						
Date of commencement of studies	October 2020	Academic year of realisation of subject			2022/2023		
Education level	first-cycle studies	Subject group					
Mode of study	Full-time studies	Mode of delivery			at the university		
Year of study	3	Language of instruction			Polish		
Semester of study	5	ECTS credits			3.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Department of Electrochemistry, Corrosion and Materials Engineering -> Faculty of Chemistry						
Name and surname of lecturer (lecturers)	Subject supervisor	prof. dr hab. inż. Juliusz Orlikowski					
	Teachers	prof. dr hab. inż. Juliusz Orlikowski					
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	15.0	0.0	0.0	30
	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	30	5.0		40.0		75
Subject objectives	Mastering the theoretical and practical basis for the nondestructive testing and corrosion monitoring						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	K6_W08	Ability to apply appropriate corrosion monitoring techniques to obtain optimal measurement results			[SW1] Assessment of factual knowledge		
	K6_U04	Ability to use NDT measurement methods to apply various defects			[SU1] Assessment of task fulfilment		
Subject contents	Nondestructive testing: visual methods magnetic particle testing radiographic testing acoustic emission Corrosion monitoring: linear polarization method electric resistance method coupon method electrochemical noise						
Prerequisites and co-requisites	Knowledge of electrochemistry and measurements of resistance						
Assessment methods and criteria	Subject passing criteria	Passing threshold			Percentage of the final grade		
	Practical exercise	60.0%			50.0%		
	Written exam	60.0%			50.0%		
Recommended reading	Basic literature	G. Wranglen – podstawy korozji i ochrony metali. WNT, Warszawa 1975  H.H. Uhlig – Ochrona przed korozją, WNT, Warszawa 1976					
	Supplementary literature	See: <a href="http://www.korozja.pl">www.korozja.pl</a>					
	eResources addresses	Adresy na platformie eNauczanie:					
Example issues/ example questions/ tasks being completed	Theoretical and practical aspects of diagnosis of corrosion and corrosion monitoring						
Work placement	Not applicable						