GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	, PG_00065832		
Field of study	Materials Engineering		
Date of commencement of studies	October 2024	Academic year of realisation of subject	2024/2025
Education level	second-cycle studies	Subject group	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	3.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Department of Corrosion and Electrochemistry -> Faculty of Chemistry		
Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. inż. Stefan Krakowiak	
	Teachers		

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	0.0	0.0	0.0	30.0	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	4.0	41.0	75

Subject objectives

Teaching students how to prepare a technological project of anti-corrosion protection and select construction materials.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K7_W05] Knows methods, techniques, tools and materials for solving complex engineering tasks relevant to materials engineering.	The student presents a project for corrosion protection of an industrial facility indicated by the instructor.	[SW1] Assessment of factual knowledge
[K7_U04] Can undertake a detailed analysis of the obtained results and develop a technical report or presentation, also in English.	The student defines the environmental hazards of an industrial structure. The student identifies the types of corrosion occurring in a given corrosive environment.	[SU3] Assessment of ability to use knowledge gained from the subject
[K7_W04] Has enhanced knowledge of materials sciences, within the scope required for describing and understanding the correlation between the chemical composition, structure and mechanical and physical properties.	The student defines the environmental hazards of an industrial structure. The student identifies the types of corrosion occurring in a given corrosive environment.	[SW1] Assessment of factual knowledge
[K7_K02] Is aware of the importance of non-technical aspects and effects of engineering, including the influence on the environment and resulting responsibility for the decisions.	The student collaborates with the team to solve design problems.	[SK1] Assessment of group work skills [SK4] Assessment of communication skills, including language correctness

Subject contents

Technical documentation of the project. Pre-design corrosion measurements. Technical description of the project. Consistency of the structural and technical design and the anti-corrosion protection design. Conditions for the implementation of corrosion protection. Supervision system and conditions for acceptance of works.

Prerequisites and co-requisites

Fundamentals of coating protection against corrosion, resistance of materials to corrosion in aggressive environments

<table>
<tr><td>Assessment methods and criteria</td><td colspan="3"><table><tr><th>Subject passing criteria</th><th>Passing threshold</th><th>Percentage of the final grade</th></tr><tr><td>Project 2 completion</td><td>100.0%</td><td>30.0%</td></tr><tr><td>Project 1 completion</td><td>100.0%</td><td>70.0%</td></tr></table></td></tr>
<tr><td rowspan="3">Recommended reading</td><td>Basic literature</td><td colspan="2">on e-learning</td></tr>
<tr><td>Supplementary literature</td><td colspan="2">on e-learning</td></tr>
<tr><td>eResources addresses</td><td colspan="2">Podstawowe
https://enauczanie.pg.edu.pl/moodle/course/view.php?id=5506 - They will appear when the item is opened.
Uzupełniające
Adresy na platformie eNauczanie:</td></tr>
<tr><td>Example issues/ example questions/ tasks being completed</td><td colspan="3">- Protection against corrosion of mooring dolphins / Gdańsk Bay / Naftoport- Selection of construction material for a sulfuric acid tank containing 3000 ppm NaCl, acid concentration 58-76%</td></tr>
<tr><td>Work placement</td><td colspan="3">Not applicable</td></tr>
</table>

Document generated electronically. Does not require a seal or signature.