GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	, PG_00059945		
Field of study	Environmental Engineering		
Date of commencement of studies	February 2024	Academic year of realisation of subject	2023/2024
Education level	second-cycle studies	Subject group	Optional subject group
Mode of study	Full-time studies	Mode of delivery	at the university
Year of study	1	Language of instruction	Polish
Semester of study	1	ECTS credits	3.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Department of Geotechnical and Hydraulic Engineering -> Faculty of Civil and Environmental Engineering		
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Angelika Duszyńska	
	Teachers	dr inż. Angelika Duszyńska prof. dr hab. inż. Adam Szymkiewicz	

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	15.0	15.0	0.0	15.0	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	30.0	80

Subject objectives

To familiarize students with technical solutions used in geoengineering.

Learning outcomes

Course outcome	Subject outcome	Method of verification
K7_U03	student is able to design elements of structures protecting slopes	[SU4] Assessment of ability to use methods and tools
K7_W05	student has knowledge about the influence of engineering activities on environment	[SW3] Assessment of knowledge contained in written work and projects
K7_U06	student is able to use the acquired methods of land reclamation and mathematical models to solve problems in environmental geoengineering	[SU4] Assessment of ability to use methods and tools

Subject contents

modeling contaminant transport in soils, soil improvement, protection of slopes, geotechnical design, Earth's natural resources, environmental Impact

Prerequisites and co-requisites

completed courses on geotechnical engineering and hydrogeology or similar courses

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
	0.0%	0.0%
evaluation of presentation	60.0%	40.0%
evaluation of projects	60.0%	60.0%

Recommended reading	Basic literature	Zadroga B., Olańczuk-Neyman K., Ochrona i rekultywacja podłoża gruntowego, Wydawnictwo Politechniki Gdańskiej, 2001 Malina G., Likwidacja zagrożenia środowiska gruntowo-wodnego na terenach zanieczyszczonych, Wydawnictwo Politechniki Częstochowskiej, 2007 PN-EN 1997 Eurokod 7: Projektowanie geotechniczne Pisarczyk S.: Geoinżynieria. Metody modyfikacji podłoża gruntowego, Oficyna Wydawnicza Politechniki Warszawskiej, Warszawa 2014. Stryczek S.: Podstawy geoinżynierii. Wydawnictwo AGH. Kraków 2021 qUrbański (red.): Podstawy projektowania geotechnicznego. Wprowadzenie do nowych technologii w geotechnice, Wydawnictwo Politechniki Krakowskiej, 2016
	Supplementary literature	nie dotyczy
	eResources addresses	Adresy na platformie eNauczanie: Geoinżynieria Środowiska - IŚ stacj. mgr sem. 1 - r.akadem. 2023/24 - Moodle ID: 34118 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=34118
Example issues/ example questions/ tasks being completed	design of slope reclamation with reinforced soil	
Work placement	Not applicable	