GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	RIVER REGULATIONS AND DREOLGING, PG_00041428		
Field of study	Civil Engineering		
Date of commencement of studies	February 2025	Academic year of realisation of subject	2025/2026
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	2	ECTS credits	2.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Department of Geotechnics, Geology and Marine Civil Engineering -> Faculty of Civil and Environmental Engineering		
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Remigiusz Duszyński	
	Teachers		

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	15.0	15.0	0.0	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	15.0	50

Subject objectives

The student learns the rules of river regulation. Familiarizes with the methods of river regulation. Student gets acquainted with the methods of conducting dredging works.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K7_W14] knows and applies building codes and obeys the Construction Law; has knowledge on environmetal impact of investment realisation	Student has knowledge of the impact of river regulation and dredging works on the environment	[SW3] Assessment of knowledge contained in written work and projects
[K7_K04] understands the necessity of dissemination civil engineering knowlege in the society and to suport the proffesional ethos of a civil engineer	Student understands the need to disseminate knowledge about water construction and water resources in Poland	[SK4] Assessment of communication skills, including language correctness
[K7_U10] can analyse complicated environmental loads acting on a construction; can apply proper processes to design marine and hydroengineering constructions taking into consideration hydrological and hydraulical impact	Student is able to analyze complex load systems acting on sea and inland hydrotechnical structures.	[SU2] Assessment of ability to analyse information [SU4] Assessment of ability to use methods and tools
[K7_W11] has deep knowlege of marine and inland hydotechnical constructions; has knowledge about hydraulical and hydrological constrains in design and exploitation of buildings	Student has an extended knowledge of hydrotechnical structures. He can assess the conditions influencing the selection of the right structure and factors related to the operation	[SW3] Assessment of knowledge contained in written work and projects

Subject contents

Characteristics of surface waters. Regulation and hydrotechnical development of rivers. Non-damming structures. Water damming structures. Movement of water in a natural river bed. Water flow in the river bed under the bridge. Rubble lifted. Dragged rubble. Principles of selection of hydraulic parameters of the regulated riverbed and the regulatory route. Regulatory structures. Principles of conducting dredging works. Types of dredgers and selection of dredging equipment.

Prerequisites and co-requisites

None

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Test	60.0%	50.0%
	Exercise	60.0%	50.0%
Recommended reading	Basic literature	1. Bednarczyk S., Duszyński R.: Hydrauliczne i hydrotechniczne podstawy regulacji i rewitalizacji rzek. Gdańsk, 2008 2. Wołoszyn J.: Regulacja rzek i potoków, Warszawa 1998	
	Supplementary literature	1. Zastosowanie konstrukcji gabionowych w regulacji koryt cieków wodnych. R. Duszyński, Maccaferri 2017 2. Portowe roboty czerpalne i podwodne. E. Lewko; Gdynia, 2006	
	eResources addresses	Adresy na platformie eNauczanie:	
Example issues/ example questions/ tasks being completed	Farque's Principles. Gabion regulatory structures. Techniques for conducting regulatory work		
Work placement	Not applicable		

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