GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Master thesis, PG_00059965						
Field of study	Environmental Engineering						
Date of commencement of studies	February 2024		Academic year of realisation of subject	2024/2025			
Education level	second-cycle studies		Subject group				
Mode of study	Full-time studies		Mode of delivery	at the university			
Year of study	2		Language of instruction	Polish			
Semester of study	3		ECTS credits	18.0			
Learning profile	general academic profile		Assessment form	assessment			
Conducting unit	Department Of Sanitary Engineering -> Faculty Of Civil And Environmental Engineering -> Wydziały Politechniki Gdańskiej						
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Filip Gamoń					
	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	0.0	0.0	0
	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	0	30.0	420.0	450

Subject objectives	The aim of the course is to prepare the student for independently developing a master's thesis based on the analysis of theoretical and/or practical issues related to environmental engineering. During the course, the student enhances their analytical and research skills, expands specialized knowledge, and refines their abilities in academic writing, presenting research findings, and defending their conclusions. The final outcome is the preparation and submission of a master's thesis, which serves as evidence of the acquired knowledge and the ability to apply it in solving complex engineering and environmental problems.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K7_W10] has knowledge of the protection and management of intellectual, industrial and copyright resources	The student is familiar with and applies the principles of intellectual property protection and copyright law when developing their master's thesis, including proper citation of sources, use of graphic materials, and data utilization.	[SW3] Assessment of knowledge contained in written work and projects
[K7_W12] has knowledge of contemporary and useful principles on data acquisition, filtration, processing and analysis	The student is able to select and apply appropriate methods for acquiring, processing, and analyzing data necessary for the completion of a master's thesis in the field of environmental engineering and energetic.	[SW3] Assessment of knowledge contained in written work and projects
[K7_U01] can obtain information from literature, databases and other sources; can integrate the obtained information, interpret and critically evaluate them, draw conclusions, and formulate and comprehesively justify the opinions	The student independently searches for and selects information from professional literature, databases, and online sources, critically analyzes and interprets it, and then formulates logical conclusions, providing justification within the context of the engineering issue being addressed.	[SU1] Assessment of task fulfilment [SU3] Assessment of ability to use knowledge gained from the subject [SU2] Assessment of ability to analyse information
[K7_U05] can rely on scientific sources for modern methods and technologies, and propose trends in the development of methods and rules for acquiring, filtering, processing and analyzing data	The student utilizes current scientific sources to analyze modern methods and technologies used in environmental engineering and is able to identify directions for their further development, based on relevant data and its analysis.	[SU3] Assessment of ability to use knowledge gained from the subject [SU4] Assessment of ability to use methods and tools [SU2] Assessment of ability to analyse information
K7_U09	The student is able to independently plan and carry out the learning process necessary for developing a master's thesis, identifies gaps in their knowledge, and takes appropriate actions to fill them.	[SU5] Assessment of ability to present the results of task [SU4] Assessment of ability to use methods and tools [SU2] Assessment of ability to analyse information

Subject contents

The course *Masters Thesis* is a key component of the master's degree program in Environmental Engineering and Energy. Its aim is to enable students to independently conduct scientific research, design engineering solutions, and develop a thesis within the fields of environmental engineering and energy. The masters thesis is intended to enhance students research, analytical, and design skills, as well as to refine their abilities in academic writing and presenting research findings.

Prerequisites and co-requisites

Selection of Master's Thesis Topic:
The student should choose the topic of their masters thesis in consultation with their supervisor, ensuring it aligns with their research interests and skill set.

Preliminary Literature Review:
The student should familiarize themselves with subject literature and selected scientific studies in the field of environmental engineering.

Knowledge of Research Methods and Analytical Tools:
The student should possess basic knowledge of data analysis methods and tools used in environmental engineering (e.g., software for statistical analysis, environmental modeling).

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Master's thesis	60.0%	100.0%

Recommended reading

Basic literature	According to the topic of the thesis
Supplementary literature	According to the topic of the thesis
eResources addresses	Adresy na platformie eNauczanie:

Example issues/ example questions/ tasks being completed	What laboratory/information technology techniques are required to conduct research for a master's thesis? What statistical analyses are essential for proper data interpretation? What structural elements should a well-written master's thesis in the field of environmental engineering and energy include? What are the citation rules for sources in a master's thesis according to current academic standards?
Work placement	Not applicable

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