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 2025	Academic year of realisation of subject	2025/2026
Education level	second-cycle studies	Subject group	Optional 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	2	Language of instruction	Polish
Semester of study	3	ECTS credits	18.0
Learning profile	general academic profile	Assessment form	exam
Conducting unit	Department of Sanitary Engineering -> Faculty of Civil and Environmental Engineering -> Faculties of Gdańsk University of Technology		
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Karolina Matej-Łukowicz	
	Teachers		

Lesson types

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

Based on the knowledge of studies and work during the diploma semester, the student solves the problem formulated in the subject of the master diploma thesis. The student presents the prepared diploma thesis.

Learning outcomes

Course outcome	Subject outcome	Method of verification
K7_U09	The student demonstrates the ability to critically assess their own knowledge base, recognize areas requiring improvement, and develop effective strategies for ongoing autonomous learning.	[SU4] Assessment of ability to use methods and tools
[K7_W12] has knowledge of contemporary and useful principles on data acquisition, filtration, processing and analysis	Student is able to search for, analyze, and filter data and materials necessary for completing a scientific task.	[SW3] Assessment of knowledge contained in written work and projects
[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	he student demonstrates the ability to retrieve knowledge from contemporary sources, including artificial intelligence tools. Furthermore, they possess competencies in analyzing, filtering, and processing information.	[SU2] Assessment of ability to analyse information
[K7_W10] has knowledge of the protection and management of intellectual, industrial and copyright resources	Student can find and properly use sources of information relating to the problem area of the diploma thesis	[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	Student can find and properly use sources of information relating to the problem area of the diploma thesis	[SU1] Assessment of task fulfilment

Subject contents

Prerequisites and co-requisites	The student should have a basic knowledge of the principles of designing water and sewage and gas installations, installation materials available on the market and legal regulations in this field.	
Assessment methods and criteria	Subject passing criteria	Passing threshold / Percentage of the final grade
	Review of the thesis	60.0% / 100.0%
Recommended reading	Basic literature	1. PN-92 / B-01706 Water supply installations. Design requirements 2. PN-88 / M-54907 Screw water meters with vertical axis of the meter 3. Regulation of the Minister of Infrastructure of November 6, 2008. on technical conditions to be met by buildings and their location 4. PN-EN 33-2011 Toilet bowls and toilet sets 5. PN-EN 31-2011 Washbasins connecting dimensions 6. PN-EN 695: 2005 Kitchen sinks - connection dimensioning 7. PN-EN 232: 2005 Bath tubs connecting dimensions 8. Technical requirements of Cobrti Instal. Technical conditions for the construction and acceptance of water supply installations. 9. PN-B-10725: 1997 Water supply, external pipes, requirements and tests 10. PN-EN 12056-2 Gravity drainage systems inside buildings, sanitary drainage, layout and calculation design 11. Technical requirements of Cobrti Instal. Technical conditions for the execution and acceptance of the sewage system. 12. PN EN 1610 Construction and testing of sewage pipes 13. PN-B-01707 Sewerage installations - requirements in design 14. PN-EN 1917: 2004 Manholes and non-manholes made of unreinforced concrete, of concrete reinforced with steel and reinforced concrete fibers15. PN-B-10729: 1999 Sewerage, drains 16. Regulation of the Minister of the Interior and Administration of August 16, 1999 on the technical conditions for the use of residential buildings
	Supplementary literature	1. Chudzicki J., Sosnowski S., Sewerage installations: design, execution, operation, Wydawnictwo Siedel-Przywecki 20112. Chudzicki J., Sosnowski S., Water supply installations: design, execution, operation, Wydawnictwo Siedel-Przywecki 20113. Gaßner A ., Sanitary installations: a guide for designers and installers, WydawnictwoNaukowo-Techniczne 2008
	eResources addresses	
Example issues/ example questions/ tasks being completed	- review of current legal acts, standards and literature in the field of work; - preparation of a technical description of the solutions used for the implementation of individual installations; - performing engineering calculations for the selection of diameters and media flow conditions; - preparation of drawing documentation consisting in marking out the wires of individual installations with elements of fittings on the architectural bases provided by the promoter. volume_up content_copy share star_border	
Practical activites within the subject	Not applicable	

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