GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Buildins Installations II, PG_00062607						
Field of study	Civil Engineering						
Date of commencement of studies	October 2023		Academic year of realisation of subject	2024/2025			
Education level	first-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	4		ECTS credits	3.0			
Learning profile	general academic profile		Assessment form	assessment			
Conducting unit	Department of Sanitary Engineering -> Faculty of Civil and Environmental Engineering						
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. inż. Jakub Drewnowski				
	Teachers						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	0.0	15.0	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	0.0	0.0	30

Subject objectives	
	The aim of the course is to familiarize students with the different types of sanitary networks and installations construction, their use, construction, design principles, advantages and disadvantages of the different solutions and technologies in terms of using this knowledge in the professional practice of an Engineer Construction

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K6_W06] Demonstrates practical knowledge and understanding of materials, devices and tools, processes and technologies in the field of civil engineering (and their limitations).	The student understands the effects of a sanitary engineer's activities, the impact on the environment and the associated responsibility for the decisions made.	[SW1] Assessment of factual knowledge [SW2] Assessment of knowledge contained in presentation [SW3] Assessment of knowledge contained in written work and projects
[K6_W03] Demonstrate knowledge and understanding of the processes, established standards and design methods in the civil engineering subject area and of their limitations.	The student is able to find and properly use sources of information, legal acts and standards relating to the problem area of designing sanitary installations and networks	[SW1] Assessment of factual knowledge [SW2] Assessment of knowledge contained in presentation [SW3] Assessment of knowledge contained in written work and projects
[K6_U03] Design engineering objects and details, processes and engineering systems by applying appropriate standards and methods of design.	.The student is able to use the acquired knowledge in the field of basic sciences in order to understand the principles of operation and practical application of this knowledge in the use of computer technology in the design of sanitary installations and networks.	[SU2] Assessment of ability to analyse information [SU3] Assessment of ability to use knowledge gained from the subject [SU5] Assessment of ability to present the results of task [SU1] Assessment of task fulfilment [SU4] Assessment of ability to use methods and tools
[K6_U04] Reads and prepares construction documentation (including drawings, graphic documentation in the CAD environment), efficiently uses maps as well as architectural, construction and geodetic drawings.	A student of civil engineering, while designing the structure of a building, analyzes and describes the most appropriate solutions and technologies in the field of necessary building installations. In this way, it establishes a partnership dialogue with the specialists who design these installations.	[SU1] Assessment of task fulfilment [SU2] Assessment of ability to analyse information [SU4] Assessment of ability to use methods and tools

Subject contents

LECTURES: Municipal infrastructure networks. Installations: division, installation industry projects. Basic solutions for drinking water supply systems (methods of supplying buildings with water, materials used). Fire protection systems Heating installations (division, materials and technical solutions used, with particular emphasis on central heating, heat substation room).

Project: Plumbing Details of cold water installations, information on hot water solutions Sanitary sewer systems: utensils, materials, design principles. Rainwater drainage systems: traditional solutions and vacuum installation, design principles, materials used. Division, design principles and details of gas installation solutions.

Prerequisites and co-requisites

Completed basic program in the field of general construction.

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Colloquium and project passing	60.0%	100.0%

Recommended reading

Basic literature	1. Sosnowski S., Tabernacki J., Chudzicki J.: Instalacje wodociągowe i kanalizacyjne. Wyd. Instalator Polski, Warszawa, 2000. 2. Poradnik: Instalacje wodociągowe, kanalizacyjne i gazowe. Praca zbiorowa pod red. M. Chudzickiego, Arkady, Warszawa,1976.
Supplementary literature	1. Katalogi wyrobów i firmowe poradniki dla projektantów: Geberit, PipeLife, Wavin, LPM Danfoss, COMAP, PURMO, KanTherm, PoWoGaz S.A., Metron, AQUATHERM, Cuprum, COPRAX, ROCKWOOL, Thermaflex i in.; 2. Obowiązujące normy, przepisy i wytyczne, a w szczególności: Warunki Techniczne Wykonania i Odbioru Robót Budowlano Montażowych, Tom II: Instalacje Sanitarne i Przemysłowe, ARKADY, Warszawa 1988 oraz Wymagania Techniczne COBRTI INSTAL zeszyt 1-10, Warszawa, 1999 do 2005.
eResources addresses	Adresy na platformie eNauczanie:

Example issues/ example questions/ tasks being completed

Connection of the water supply system to the municipal water supply line. Materials used in plumbing systems. Fire protection systems in buildings. Gas installations, materials, gas meters. Hot water installations are divided by regulation. Heating systems division regulation

Work placement	Not applicable

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