



## Subject card

Subject name and code	Apprenticeship, PG_00050086						
Field of study	Environmental Engineering						
Date of commencement of studies	October 2020		Academic year of realisation of subject		2022/2023		
Education level	first-cycle studies		Subject group		Obligatory subject group in the field of study Optional subject group		
Mode of study	Full-time studies		Mode of delivery		at the university		
Year of study	3		Language of instruction		Polish		
Semester of study	6		ECTS credits		4.0		
Learning profile	general academic profile		Assessment form		assessment		
Conducting unit	Department of Environmental Engineering Technology -> Faculty of Civil and Environmental Engineering						
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. inż. Eliza Kulbat				
	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						
	Address on the e-learning platform: <a href="https://enauczanie.pg.edu.pl/moodle/course/view.php?id=11013">https://enauczanie.pg.edu.pl/moodle/course/view.php?id=11013</a>						
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		5.0		100.0	105
Subject objectives	Getting to know the methods of management, operation, design and execution in environmental engineering.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[K6_U02] can work individually and in a team; knows how to estimate the time needed to complete the task ordered; is able to develop and implement a work schedule that ensures deadlines		The student is able to complete an individual or group task.		[SU5] Assessment of ability to present the results of task [SU4] Assessment of ability to use methods and tools [SU1] Assessment of task fulfilment		
	[K6_U14] can organize, estimate executive construction works (installation) in accordance with the principles of construction technology and organization, apply the principles of safety and health at work during the implementation of engineering tasks		The student knows how to organize, cost estimate installation works and apply health and safety rules.		[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 [SU1] Assessment of task fulfilment		
	[K6_K01] can think and act in a creative and enterprising way; can set priorities for the implementation of an individual or group task; understands the need for continuous training and professional responsibility for their activities and team		The student is able to plan an individual or group task.		[SK1] Assessment of group work skills [SK5] Assessment of ability to solve problems that arise in practice [SK3] Assessment of ability to organize work		
	[K6_W10] has elementary knowledge in the field of running a business in the sanitary industry; knows the general principles of creating and developing forms of individual entrepreneurship; knows the basic principles of health and safety at work in the laboratory and at the construction site		The student has elementary knowledge of running a business in the sanitary industry and knows the health and safety rules in the laboratory and on the construction site.		[SW1] Assessment of factual knowledge		

Subject contents	Place of practice: specialized companies in the sanitary industry or relevant departments in offices. The scope of the internship depends on the place of the internship and gives the student the opportunity to learn about: a) with works related to the design or construction of sanitary and internal installations, gas, water supply, sewage and heating networks, b) with the performance of preparatory works for the construction of the network, such as: profiling, routing, surveying inventory, c) with technology and operation of facilities such as: sewage treatment plants, municipal waste landfills, water treatment plants, d) with the activities of regional water management boards and environmental protection institutions, the city or commune office, e) with work in enterprises related to the operation and maintenance of water supply, sewage and heating networks.		
Prerequisites and co-requisites	Knowledge of the subjects carried out in semesters I - VI, with particular emphasis on vocational subjects.		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	certificate of completion of apprenticeship and apprenticeship report	60.0%	100.0%
Recommended reading	Basic literature	Book publications, magazines and internet sources related to the scope of the implemented practice.	
	Supplementary literature	Book publications, magazines and internet sources related to the scope of the implemented practice.	
	eResources addresses	Adresy na platformie eNauczanie:	
Example issues/ example questions/ tasks being completed	Design and construction of sanitary, internal, gas, water, sewage and heating installations; Performing preparatory works for network construction, such as: profiling, routing, geodetic inventory, Operation of facilities such as: sewage treatment plants, municipal waste landfills, water treatment plants, Practical familiarization with the activities of regional water management boards and environmental protection institutions, city or commune offices, Work in enterprises related to the operation and maintenance of water supply, sewage and heating networks.		
Work placement	Not applicable		