



## Subject card

Subject name and code	Public Utilities , PG_00042515						
Field of study	Environmental Engineering						
Date of commencement of studies	October 2022		Academic year of realisation of subject			2022/2023	
Education level	second-cycle studies		Subject group			Obligatory subject group in the field of study Subject group related to scientific research in the field of study	
Mode of study	Part-time studies		Mode of delivery			blended-learning	
Year of study	1		Language of instruction			Polish	
Semester of study	2		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 inż. Przemysław Kowal				
	Teachers		mgr inż. Dominika Derwis				
			dr inż. Przemysław Kowal				
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	10.0	10.0	0.0	0.0	0.0	20
	E-learning hours included: 10.0						
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	20		3.0		55.0	78
Subject objectives	General knowledge of the functioning of the municipal economy in Polish conditions. Getting to know the basic directions of activities and the needs of the municipal enterprise.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K7_W08] has knowledge necessary to understand the social, economic, legal and other non-technical determinants of engineering activities and their incorporation in engineering practice	The student is able to independently assess and determine the needs in the field of municipal management	[SW1] Assessment of factual knowledge [SW3] Assessment of knowledge contained in written work and projects
	[K7_W07] has an in-depth, structured and theoretical knowledge of municipal management, including water treatment and water renewal technologies, various types of wastewater treatment technologies, including landfill leachate, sewage sludge treatment technologies; knowledge of natural methods used in water and wastewater treatment or construction, functioning, operation and closure of waste landfills	The student understands the complexity of municipal economy issues	[SW1] Assessment of factual knowledge [SW2] Assessment of knowledge contained in presentation [SW3] Assessment of knowledge contained in written work and projects
	[K7_U14] can technically and economically analyze and evaluate the solutions and functioning of facilities and systems in the sanitary engineering or flood protection, water intakes and water infrastructure or water and wastewater treatment plants; can assess the suitability and potential of using new achievements in materials, fixtures, devices and methodologies for designing and modeling the analyzed technical infrastructure and industrial objects, including innovative solutions	The student understands the complexity of the municipal economy. He can assess the needs and possibilities in this regard.	[SU1] Assessment of task fulfilment [SU2] Assessment of ability to analyse information [SU3] Assessment of ability to use knowledge gained from the subject [SU4] Assessment of ability to use methods and tools
	[K7_U10] can, in accordance with scientific principles, use the scientific workshop to formulate and conduct preliminary research on the engineering, technological and organizational problems that arise in environmental engineering	The student has the necessary knowledge of the problems of the functioning of the municipal economy and its needs.	[SU2] Assessment of ability to analyse information [SU3] Assessment of ability to use knowledge gained from the subject [SU4] Assessment of ability to use methods and tools
Subject contents	Legal foundations of the functioning of the municipal economy in Poland. Components of municipal economy. Financing rules. The importance of spatial development planning for the functioning of the municipal economy. Needs in the field of municipal management planning. Technical equipment.		
Prerequisites and co-requisites	Completion of basic classes in the field of environmental engineering		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Completion of a design task	70.0%	50.0%
	Colloquium on the content of the lectures	60.0%	50.0%
Recommended reading	Basic literature	<p>Legal acts regarding the functioning of the municipal economy:- the law on the municipal enterprise- water law- construction law- the act on spatial developmentInternet platform <a href="http://retencja.pl">retencja.pl</a>The journal Gospodarka Komunalna with accompanying publications (Wodociągi Kanalizacja, Zielona Miejska, Recykling, Zielona Energia)Więcej o tekście źródłowymWskaż tekst źródłowy, by wyświetlić dodatkowe informacje o tłumaczeniuPrześlij opinięPanele boczne</p>	
	Supplementary literature	Websites for specialized equipment	
	eResources addresses	<p>Adresy na platformie eNauczanie: Gospodarka Komunalna dla studentów niestacjonarnych sem. 2022/2023 - Moodle ID: 29505 <a href="https://enauczanie.pg.edu.pl/moodle/course/view.php?id=29505">https://enauczanie.pg.edu.pl/moodle/course/view.php?id=29505</a></p>	

Example issues/ example questions/ tasks being completed	
Work placement	Not applicable