



## Subject card

Subject name and code	Construction management, economics and technology II, PG_00044690						
Field of study	Civil Engineering						
Date of commencement of studies	October 2020		Academic year of realisation of subject		2023/2024		
Education level	first-cycle studies		Subject group		Obligatory subject group in the field of study Humanistic-social subject group		
Mode of study	Part-time studies		Mode of delivery		at the university		
Year of study	4		Language of instruction		Polish		
Semester of study	8		ECTS credits		1.0		
Learning profile	general academic profile		Assessment form		assessment		
Conducting unit	Department of Building Engineering -> Faculty of Civil and Environmental Engineering						
Name and surname of lecturer (lecturers)	Subject supervisor		mgr inż. Agata Siemaszko				
	Teachers						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	15.0	0.0	0.0	0.0	15
	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	15		5.0		5.0	25
Subject objectives	Acquainting the student with the principles of cost estimate and scheduling of construction works using specialized computer programs.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[K6_U16] is able to manage the construction site according to codes of technology and construction management		The student is able to prepare a work schedule based on the adopted technology of works.		[SU1] Assessment of task fulfilment [SU2] Assessment of ability to analyse information		
	[K6_W14] Has knowledge on basic enterprise, management and marketing in a company; knows labour norms in civil engineering and rules of construction organizing and management		The student knows the basics of cost optimization and investment execution time.		[SW3] Assessment of knowledge contained in written work and projects		
	[K6_K01] is aware of necessity of professional and personal competences improvement; complements and broadens his knowledge about modern processes and technologies		The student has a comprehensive approach to the issues of shaping personal and professional development.		[SK5] Assessment of ability to solve problems that arise in practice		
	[K6_U10] can prepare cost estimation and schedule of construction works; is able to make basic economical analysis of engineering investment		The student is able to make a cost estimate and work schedule using computer programs.		[SU4] Assessment of ability to use methods and tools		
	[K6_U11] knows and applies rules of construction law; can estimate risk of construction works and implement proper security routines; obeys the rules of occupational safety and health		The student knows the rules of managing construction works in accordance with applicable regulations.		[SU2] Assessment of ability to analyse information		

Subject contents	Basic concepts and technologies for building constructions. Technological processes. The relationship between technology and construction and materials solutions. Efficiency of the machines, the labour cost machines. Calculation of the estimated value of the construction project. Methods of cost estimates of building objects and works. Structure (components) of price estimate. Formulas of price estimate. Methods for the preparation of cost estimates and the basis for the purpose of investor procurement. Types of cost estimates and the basis for their preparation. Tasks of the Participants in the preparation of documentation for the estimate. Calculation of unit prices of the works. Analysis of the efficiency of the construction project. Scheduling and planning works. Methods of organization and planning of works. Network methods in the organization and planning of construction works. Linear Schedules of construction works.			
Prerequisites and co-requisites				
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade	
	Final test	60.0%	40.0%	
	Presentation of exercises results	60.0%	60.0%	
Recommended reading	Basic literature	A. Dyżewski - Technologia i organizacja budowy. Arkady Warszawa 1989  A. Stefański - Technologia robót budowlanych. Arkady Warszawa 1983  Z. Kowalczyk, J. Zabielski - Kosztorysowanie i normowanie w budownictwie. WSiP, Warszawa 2013  K. Jaworski - Podstawy organizacji budowy. PWN Warszawa 2004		
	Supplementary literature	No requirements		
	eResources addresses	Adresy na platformie eNauczanie:		
	Example issues/ example questions/ tasks being completed			
	Work placement	Not applicable		