



## Subject card

Subject name and code	TECHNIQUES AND CONSTRUCTION TECHNOLOGIES, PG_00044226						
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		Optional subject group		
Mode of study	Full-time studies		Mode of delivery		at the university		
Year of study	4		Language of instruction		Polish		
Semester of study	7		ECTS credits		2.0		
Learning profile	general academic profile		Assessment form		assessment		
Conducting unit	Department of Building Structures and Material Engineering -> Faculty of Civil and Environmental Engineering						
Name and surname of lecturer (lecturers)	Subject supervisor		dr inż. Małgorzata Lachowicz				
	Teachers		dr inż. Małgorzata Lachowicz				
			dr hab. inż. Marcin Abramski				
			dr inż. Dariusz Kowalski				
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	15.0	0.0	0.0	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		5.0		15.0	50
Subject objectives	Acquainting the student with the existing modern methods of performing construction works.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[K6_W12] Has basic knowledge on building physics, including heat and moisture migration in buildings, acoustics and energy demand		The student knows the basics of building physics regarding the migration of heat and moisture in buildings, their acoustics and determining the energy demand of buildings.				
	[K6_W13] Knows the most popular construction materials and basics of technology of its fabrication		The student knows the most commonly used building materials and the basic elements of the technology of their production.				
	[K6_U12] knows rules of manufacturing and application of building materials, is able to properly choose them; is able to make simple laboratory experiments for judging quality of building materials		The student knows the principles of production and use and is able to select building materials; is able to perform simple laboratory experiments leading to the assessment of the quality of used building materials.				
	[K6_U08] can calculate the energy balance of a building		The student is able to prepare the energy balance of a building object.				
	[K6_U06] can design steel, concrete (including reinforced), wood and masonry constructions and its elements		The student can design selected elements and typical metal, reinforced concrete, composite, wooden and brick structures.				
Subject contents	New techniques and technologies in construction. Criteria for applying new constructional and material and technological solutions for foundations, walls, ceilings and flat roofs. Removal of defects new technologies.						
Prerequisites and co-requisites	No requirements.						
Assessment methods and criteria	Subject passing criteria		Passing threshold		Percentage of the final grade		
	Term work		60.0%		100.0%		

Recommended reading	Basic literature	Information materials of companies that deal with the development and implementation of new technological and construction-material solutions in general construction.
	Supplementary literature	Not applicable.
	eResources addresses	Adresy na platformie eNauczanie: Techniki i technologie budowlane 2023 - Moodle ID: 33553 <a href="https://enauczanie.pg.edu.pl/moodle/course/view.php?id=33553">https://enauczanie.pg.edu.pl/moodle/course/view.php?id=33553</a>
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	