



## Subject card

Subject name and code	, PG_00062975							
Field of study	Civil Engineering							
Date of commencement of studies	February 2023	Academic year of realisation of subject			2023/2024			
Education level	second-cycle studies	Subject group			Optional 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	3	ECTS credits			2.0			
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	dr inż. Wojciech Migda						
	Teachers	dr inż. Wojciech Migda						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM	
	Number of study hours	30.0	15.0	0.0	0.0	0.0	45	
	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	45	0.0		0.0		45	
Subject objectives	The aim of the course is to familiarize students with the possibilities and consequences of introducing modifications to existing structures.							
Learning outcomes	Course outcome	Subject outcome			Method of verification			
	[K7_W15] has deep and adequate knowledge of civil engineering, within offered specialization and profile	Students perform static calculations for an existing structure.			[SW3] Assessment of knowledge contained in written work and projects			
	[K7_U15] has advanced skills in civil engineering within offered specialization/profile	Based on computational assumptions and calculations, students propose a structural solution for an existing building, that will allow to modify it.			[SU5] Assessment of ability to present the results of task			
Subject contents	Formal and legal issues of potential building modifications.							
	Determination of static schematics for existing buildings.							
	Strengthening calculations using the FEM method.							
Prerequisites and co-requisites								
Assessment methods and criteria	Subject passing criteria	Passing threshold			Percentage of the final grade			
	Project	60.0%			60.0%			
	Lecture	60.0%			40.0%			
Recommended reading	Basic literature	1. USTAWA Prawo budowlane2. Rozporządzenie w sprawie warunków technicznych, jakim powinny odpowiadać budynki i ich usytuowanie3. Normy (Eurokody): PN-EN 1990, PN-EN 1991, PN-EN 1992, PN-EN 1993, PN-EN 1995, PN-EN 1996						
	Supplementary literature	1. Maślowski E., Spiżewska D.: Wzmacnianie konstrukcji budowlanych, Arkady, Warszawa 2002. Fromm E.: Mieć czy być?, Ucieczka od wolności3. Pratchett T.: Piekło pocztowe, Świat finansjery, Para w ruch						

	eResources addresses	Adresy na platformie eNauczenie: Modyfikacja i ocena istniejących konstrukcji - Moodle ID: 36343 <a href="https://enauczanie.pg.edu.pl/moodle/course/view.php?id=36343">https://enauczanie.pg.edu.pl/moodle/course/view.php?id=36343</a>
Example issues/ example questions/ tasks being completed	How to determine the load acting on the internal load-bearing wall when the ceiling layout is not known?	
Work placement	Not applicable	