



## Subject card

Subject name and code	Building structures and technologies I, PG_00052794						
Field of study	Architecture						
Date of commencement of studies	October 2022	Academic year of realisation of subject			2023/2024		
Education level	first-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	Full-time studies	Mode of delivery			at the university		
Year of study	2	Language of instruction			Polish		
Semester of study	4	ECTS credits			2.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Department of Technical Fundamentals of Architecture Design -> Faculty of Architecture						
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. arch. Marek Sztafrowski					
	Teachers	dr inż. arch. Marek Sztafrowski mgr inż. arch. Joanna Wojtas					
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	30.0	0.0	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	2.0		18.0		50
Subject objectives	Knowledge of technical issues related to the construction technical project. Knowledge of basic issues related to reinforced concrete and masonry structures, and relations between loads and stresses and deformations in simple elements made of reinforced concrete.						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	[K6_U01] is able to use the experience gained during studies to critically analyze the conditions and formulate conclusions for design in an interdisciplinary context	Gaining knowledge of interdisciplinary design.			[SU3] Assessment of ability to use knowledge gained from the subject [SU2] Assessment of ability to analyse information		
	[K6_W01] knows and understands construction problems, building and engineering issues related to building design; principles, solutions, constructions and building materials used in simple engineering tasks in the field of architectural and urban design	Knowledge and understanding of: construction and building issues related to building design; principles, solutions, constructions and building materials applied to perform simple tasks in the field of architectural design.			[SW3] Assessment of knowledge contained in written work and projects [SW1] Assessment of factual knowledge		
Subject contents	Basic issues related to reinforced concrete and masonry structures. Pre-design works. Architectural, construction and technical design.						
Prerequisites and co-requisites							
Assessment methods and criteria	Subject passing criteria	Passing threshold			Percentage of the final grade		
	exam	51.0%			100.0%		

Recommended reading	Basic literature	Panas J. red., Nowy poradnik majstra budowlanego, Arkady 2012. Żenczykowski W., Budownictwo ogólne, Warszawa, Arkady, 1986. Różycki S., Budownictwo ogólne 3-4, Gdańsk 1966 Budownictwo ogólne, T 1 Materiały i wyroby budowlane, Warszawa Arkady, 2007 Budownictwo ogólne, T 3 Elementy budynków. Podstawy projektowania, Warszawa Arkady, 2008 Budownictwo ogólne, T 4 Konstrukcja budynków, Warszawa Arkady, 2014 Łapko A.: Projektowanie konstrukcji żelbetowych, Arkady, Warszawa 2001 Łapko A., Jensen B. Ch.: Podstawy projektowania i algorytmy obliczeń konstrukcji żelbetowych, Arkady, Warszawa 2005. PNB-03264/2002 Konstrukcje betonowe, żelbetowe i sprężone. Obliczenia statyczne i projektowanie. PN-B-03002/1999 Konstrukcje muryne niezbrojone. Projektowanie i obliczenia statyczne.
	Supplementary literature	P. Hyks, M. Gaborik, O. Vrana, Schody, Arkady 1984 Markiewicz Przemysław, Budownictwo ogólne dla architektów, Archi-Plus 2011 (wyd. 4) Markiewicz Przemysław, Detale projektowe dla architektów, Archi-Plus 2010 (wyd. 1) Hoła J., Pietraszek P., Schabowicz K.: Obliczenia budynków wznoszonych tradycyjnie, Dolnośląskie Wydawnictwo Edukacyjne, Wrocław 2006. Starosolski W., Konstrukcje żelbetowe, Wydawnictwo Naukowe PWN, W-wa 2007. Kobiak J., Stachurski W.: Konstrukcje żelbetowe, Arkady, Warszawa 1984.
	eResources addresses	Adresy na platformie eNauzanie: Budownictwo i Konstrukcje 2023/24 - Moodle ID: 36607 <a href="https://enauzanie.pg.edu.pl/moodle/course/view.php?id=36607">https://enauzanie.pg.edu.pl/moodle/course/view.php?id=36607</a>
Example issues/ example questions/ tasks being completed	Use of technology in architectural design, related to the construction and technical design	
Work placement	Not applicable	