GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Bulilding structures and technologies I, PG_00052633		
Field of study	Architecture		
Date of commencement of studies	October 2020	Academic year of realisation of subject	2021/2022
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	English
Semester of study	4	ECTS credits	2.0
Learning profile	general academic profile	Assessment form	exam
Conducting unit	Department of Technical Fundamentals of Architecture Design -> Faculty of Architecture		
Name and surname of lecturer (lecturers)	Subject supervisor	mgr inż. Tomasz Zybała	
	Teachers	mgr inż. Tomasz Zybała	

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

Address on the e-learning platform: https://enauczanie.pg.edu.pl/moodle/course/view.php?id=22856
Adresy na platformie eNauczanie:

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

Learning about technical issues related to the implementation of a construction design, technical design.

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		[SU3] Assessment of ability to use knowledge gained from the subject
[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		[SW3] Assessment of knowledge contained in written work and projects

Subject contents	Basic types of building structures, division, definitions. Basic issues related to reinforced concrete and masonry structures. Pre-design work. Architectural and construction project. Selected issues of fire safety regulations.Finishing works. Building elements, e.g. stairs, facade systems and cladding, glazed walls, curtain walls, suspended ceilings, floors and floors, etc. Relations between load, stresses and deformation in reinforced concrete elements.
Prerequisites and co-requisites	

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Building elements project	100.0%	25.0%
Exam	51.0%	25.0%
Structure elements projekct	100.0%	25.0%
Test	51.0%	25.0%

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 murowe 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-Plus2010 (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.: Konstrukcjeżelbetowe, Arkady, Warszawa 1984.
	eResources addresses	
Example issues/ example questions/ tasks being completed	Presentation linked to use of technology in architectural design, related to the implementation of a construction design, technical design.	
Work placement	Not applicable	