GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	General Building Technology II, PG_00055687		
Field of study	Architecture		
Date of commencement of studies	October 2022	Academic year of realisation of subject	2022/2023
Education level	first-cycle studies	Subject group	Obligatory subject group in the field of study
Mode of study	Full-time studies	Mode of delivery	blended-learning
Year of study	1	Language of instruction	Polish
Semester of study	2	ECTS credits	3.0
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. Bogusława Konarzewska	
	Teachers	dr inż. arch. Bogusława Konarzewska	

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	15.0	30.0	0.0	0.0	0.0	45

E-learning hours included: 15.0

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	5.0	25.0	75

Subject objectives

The aim of the course is to introduce student to basics of general buidling technology, in the field of knowledge of building land and groundwater, earthworks, designing foundations and walls, floorslabs. During the course students also get acquainted with types of loads acting on the building, structural systems of buildings and the definition existing in the Construction Law related to the above issues . The aim of the course is also to become familiar with and acquire the skills of drawing and reading and drawing architectural and construction drawings: sections, plans etc.

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	The student is able to analyze the conditions and design context in terms of execution possibilities, can propose appropriate technological and material solutions in consultation with designers from other professions.	[SU4] Assessment of ability to use methods and tools [SU3] Assessment of ability to use knowledge gained from the subject [SU1] Assessment of task fulfilment
[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	The student is able to propose and draw on his own, in accordance with the rules of architectural and construction drawing, basic construction solutions for the created projects in the given scope of knowledge.	[SW3] Assessment of knowledge contained in written work and projects [SW2] Assessment of knowledge contained in presentation

Subject contents

Basic terms used in general construction. Basic types of building structures, division, definitions. Classification of loads acting on structures. Types of building foundation. Building land/soils. Division and classification. Water in soils. Influence of weather, water and ground conditions on the foundation of a building. Marking out building location. Ground works - execution rules. Protection of excavations. Building foundations, rules of execution, division. Direct foundations, detailed description: benches, footings. Direct foundations, foundation grates, slabs, box foundations, foundation blocks. Special foundations on piles. Design of pile grates. Foundations on wells, caissons. Special cases of foundation, foundation next to the neighbor. Construction dilatations. Dredging and strengthening the foundations. . Walls types: masonry, wooden, modular structures, basic types and principles of masonry. Chimneys - rules of execution. Building and structural elements shaping the wall surfaces: cornices, pilasters, plinths.

Prerequisites and co-requisites	The student has a basic knowledge of building materials and solutions.
Assessment methods and criteria	

Subject passing criteria	Passing threshold	Percentage of the final grade
test	60.0%	50.0%
tasks	60.0%	50.0%

Recommended reading	Basic literature	Chudzicki Mariusz [i in.], Vademecum budowlane : collectiva work. Warsaw, Arkady, 1994 Janicki Stefan, Sikorski Józef, Ktosiński Marian, Wymiarowanie konstrukcji murowych i zespolonych. Warsaw, Arkady, 1974 Lewicki Bohdan [i in.], Budynki wznoszone metodami uprzemysłowionymi. Projektowanie konstrukcji i obliczenia. Warsaw, Arkady, 1979 Neufert Ernst, Podręcznik projektowania architektoniczno-budowlanego. Warsaw, Arkady, 1980 Pawłowski Paweł, Budownictwo ogólne. Warsaw, National Scentific Publisher. 1983 Poniatowski Stanisław, Warunki techniczne wykonania i odbioru robót budowlano-montażowych. Warsaw, Arkady, 1988 Sieczkowski J., Nejman T., Ustroje Budowlane, Publishing House of the Warsaw University of Technology, Warsaw, 1991 r. Żeńczykowski W., Budownictwo Ogólne, t. 2/1, Arkady, Warsaw, 1986 r. Tauszyński K., School and Pedagogical Publisher, Warsaw, 1982 r. Praca zbiorowa, Poradnik Majstra Budowlanego, Warsaw, Arkady 1992
	Supplementary literature	Professional magazines such as: Murator, Insulation, Building Materials
	eResources addresses	Adresy na platformie eNauczanie: Building Technologies II 2022/2023 - Moodle ID: 28749 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=28749 Building Technologies II 2022/2023 - Moodle ID: 28749 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=28749
Example issues/ example questions/ tasks being completed	To draw a plan view of the building. Construct and draw a cross-section of the building. Designing and drawing a small architecture object in accordance with the rules of technical drawing.
Work placement	Practice at the construction site.