GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	General Building Technology I, PG_00061503		
Field of study	Architecture		
Date of commencement of studies	October 2024	Academic year of realisation of subject	2024/2025
Education level	first-cycle studies	Subject group	Obligatory subject group in the field of study
Mode of study	Full-time studies	Mode of delivery	at the university
Year of study	1	Language of instruction	Polish
Semester of study	1	ECTS credits	3.0
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	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: 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	5.0	25.0	75

Subject objectives

Student becomes acquainted with main buidling materials.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[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	recognizes and classifies basic building materials, describes properties and indicates typical applications of basic building materials, knows energy-saving and environmentally friendly building solutions and materials	[SW3] Assessment of knowledge contained in written work and projects [SW2] Assessment of knowledge contained in presentation
[K6_U04] is able to use analytical methods to formulate and solve project tasks	recognizes and classifies basic building materials, describes properties and indicates typical applications of basic building materials, knows energy-saving and environmentally friendly building solutions and materials	[SU5] Assessment of ability to present the results of task [SU1] Assessment of task fulfilment

Subject contents	Introduction. Classification of building materials and products used in architecture. The regulations concerning the particular application of building materials. Demands posed for building materials and products, general features characterizing building materials. General classification of building materials and products used in architecture: 1. Naturals and stones. 2. Woods and products of wood. 3. Ceramics. 4. Concrete. 5. Cements. 6. Glass and glass products. 7. Metals, metal alloys. 8. Isolating materials –termal and acqustic. 9. Material for damp and hydro isolation. 10. Paints. 11. Plastics. 12. Innovative building materials. 13. Building materials versus natural environments and the micro- environment the building. 14. Energy-efficient materials and technologies. Practical approach to building materials harmonizing with the lectures programme.
Prerequisites and co-requisites	

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Exam	58.0%	65.0%
design exercises	57.0%	35.0%

Recommended reading

Basic literature	1. Zenczykowski W., Budownictwo ogolne t. 1: materialy i wyroby budowlane, Arkady, Warszawa1992. 2. Stefanczyk B., Budownictwo ogolne. t. 1 Materialy i wyroby budowlane /.. Arkady, Warszawa, 2010. 3. E. Osiecka E., Materiały budowlane. Kamień - ceramika - szkło OWPW 2010, Materiały budowlane. Spoiwa mineralne - kruszywa OWPW 2005, Materiały budowlane. Tworzywa sztuczne OWPW Warszawa 2005.
Supplementary literature	1. Panas J. Nowy poradnik majstra budowlanego. Arkady, Warszawa, 2005. 2. Markiewicz M., Kształtowanie architektury, Wydawnictwo: Archi-Plus 2006. 3. Lewandowski Witold M. Proekologiczne odnawialne zrodla energii, Wydawnictwa Naukowo-Techniczne, Warszawa 2007.
eResources addresses	Adresy na platformie eNauczanie:

Example issues/ example questions/ tasks being completed	Report from a visit to the construction site - characterize the materials used earlier in class, take pictures, provide a comment, present to the group. Acquaintance with the next generation of thermal insulation materials, analysis of their applications within building structures, individual drawing of details using these materials. Drawing exercises on the use of specific building materials.
Work placement	Not applicable