



## Subject card

Subject name and code	General Building Technology I, PG_00061503						
Field of study	Architecture						
Date of commencement of studies	October 2023	Academic year of realisation of subject			2023/2024		
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 building materials.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[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		[SU1] Assessment of task fulfillment [SU5] Assessment of ability to present the results of task		
	[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		[SW2] Assessment of knowledge contained in presentation [SW3] Assessment of knowledge contained in written work and projects		

Subject contents	<p>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.</p> <p>General classification of building materials and products used in architecture:</p> <ol style="list-style-type: none"> <li>1. Naturals and stones.</li> <li>2. Woods and products of wood.</li> <li>3. Ceramics.</li> <li>4. Concrete.</li> <li>5. Cements.</li> <li>6. Glass and glass products.</li> <li>7. Metals, metal alloys.</li> <li>8. Isolating materials –thermal and acoustic.</li> <li>9. Material for damp and hydro isolation.</li> <li>10. Paints.</li> <li>11. Plastics.</li> <li>12. Innovative building materials.</li> <li>13. Building materials versus natural environments and the micro- environment the building.</li> <li>14. Energy-efficient materials and technologies.</li> </ol> <p>Practical approach to building materials harmonizing with the lectures programme.</p>											
Prerequisites and co-requisites												
Assessment methods and criteria	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">Subject passing criteria</th> <th style="width: 33%;">Passing threshold</th> <th style="width: 34%;">Percentage of the final grade</th> </tr> </thead> <tbody> <tr> <td>design exercises</td> <td>57.0%</td> <td>35.0%</td> </tr> <tr> <td>Exam</td> <td>58.0%</td> <td>65.0%</td> </tr> </tbody> </table>			Subject passing criteria	Passing threshold	Percentage of the final grade	design exercises	57.0%	35.0%	Exam	58.0%	65.0%
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design exercises	57.0%	35.0%										
Exam	58.0%	65.0%										
Recommended reading	Basic literature	<ol style="list-style-type: none"> <li>1. Zenczykowski W., Budownictwo ogolne t. 1: materialy i wyroby budowlane, Arkady, Warszawa 1992.</li> <li>2. Stefanczyk B., Budownictwo ogolne. t. 1 Materialy i wyroby budowlane /.. Arkady, Warszawa, 2010.</li> <li>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.</li> </ol>										
	Supplementary literature	<ol style="list-style-type: none"> <li>1. Panas J. Nowy poradnik majstra budowlanego. Arkady, Warszawa, 2005.</li> <li>2. Markiewicz M., Kształtowanie architektury, Wydawnictwo: Archi-Plus 2006.</li> <li>3. Lewandowski Witold M. Proekologiczne odnawialne źródła energii, Wydawnictwa Naukowo-Techniczne, Warszawa 2007.</li> </ol>										
	eResources addresses	<p>Adresy na platformie eNauczenie:</p> <p>General Building Technology I 2023/2024 - Moodle ID: 33788  <a href="https://enauczenie.pg.edu.pl/moodle/course/view.php?id=33788">https://enauczenie.pg.edu.pl/moodle/course/view.php?id=33788</a></p>										
Example issues/ example questions/ tasks being completed	<p>Report from a visit to the construction site - characterize the materials used earlier in class, take pictures, provide a comment, present to the group.</p> <p>Acquaintance with the next generation of thermal insulation materials, analysis of their applications within building structures, individual drawing of details using these materials.</p> <p>Drawing exercises on the use of specific building materials.</p>											
Work placement	Not applicable											