



## Subject card

Subject name and code	Building and Installation Materials, PG_00048438						
Field of study	Chemistry in Construction Engineering						
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	3		ECTS credits		4.0		
Learning profile	general academic profile		Assessment form		assessment		
Conducting unit	Department of Building Structures and Material Engineering -> Faculty of Civil and Environmental Engineering						
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. inż. Michał Wójcik				
	Teachers						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	30.0	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		50.0	100
Subject objectives	After the Building Materials course the student will be able to: memorize and define the physical and mechanical properties of the building and installation materials and classify them to one of the basic group; explain the processes, which take place in the building materials; interpret and apply the standards concerning the quality and properties of building materials, apply various building materials.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	K6_W05		The student has knowledge of building and installation materials, knows the basic principles of testing the functional properties of materials and has basic knowledge of the use of building materials		[SU3] Assessment of ability to use knowledge gained from the subject [SU2] Assessment of ability to analyse information [SU1] Assessment of task fulfilment		
	K6_U02		The student knows how to work in a group, can analyze the obtained research results.		[SK1] Assessment of group work skills [SK3] Assessment of ability to organize work		
Subject contents	Technical properties of building materials. Natural stone materials. Ceramic building products. Concrete, lightweight aggregates, cavernous concrete, cellular concrete, foamed concrete. Products based on lime, Portland cement , and gypsum binders. Glass properties and products used in construction industry. Wood and wooden building products. Materials for thermal and sound insulation. Bituminous and plastic materials for damp proofing. Plastic properties, classification, products, usage in construction industry. Painting materials and various finishing. Installation materials.						
Prerequisites and co-requisites	Basic knowledge of physics and chemistry.						
Assessment methods and criteria	Subject passing criteria		Passing threshold		Percentage of the final grade		
	Written test.		50.0%		50.0%		
	Oral test		50.0%		50.0%		
Recommended reading	Basic literature		Lack of materials.				

	Supplementary literature	<p>Stefańczyk B., <i>Budownictwo ogólne</i>, tom 1, Warszawa: Arkady 2005.</p> <p>Szymański E., <i>Materiałoznawstwo budowlane z technologią betonu</i>, cz. 1. i 2., Warszawa: Oficyna Wydawnicza Politechniki Warszawskiej, 2005.</p> <p>Żenczykowski W., <i>Budownictwo ogólne</i>, t. 1., Warszawa: Arkady, 1992.</p>
	eResources addresses	Adresy na platformie eNauczanie:
Example issues/ example questions/ tasks being completed	Name the construction product, describe production technology and other materials used in its manufacture, specify its basic physical and mechanical properties and give its application in construction.	
Work placement	Not applicable	