GDAŃSK UNIVERSITY OF TECHNOLOGY

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 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	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	mgr inż. Sławomir Dobrowolski dr inż. Elżbieta Haustein dr hab. inż. Jakub Drewnowski	

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

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	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	Stefańczyk B., *Budownictwo ogólne*, tom 1, Warszawa: Arkady 2005. Szymański E., *Materiałoznawstwo budowlane z technologią betonu*, cz. 1. i 2., Warszawa: Oficyna Wydawnicza Politechniki Warszawskiej, 2005. Żenczykowski W., *Budownictwo ogólne*, t. 1., Warszawa: Arkady, 1992.
	eResources addresses	
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	