GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Special Concretes, PG_00040233		
Field of study	Civil Engineering		
Date of commencement of studies	February 2024	Academic year of realisation of subject	2024/2025
Education level	second-cycle studies	Subject group	
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	2.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Department of Mechanics of Materials and Structures -> Faculty of Civil and Environmental Engineering		
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Marzena Kurpińska	
	Teachers		

Lesson types and methods of instruction

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

Subject objectives

Supplementing messages purchased during the basic concerning course is a purpose of the object of technology of concrete. Acquaintance of cement materials of a new generation and unconventional methods or conditions of arranging and the care. Practical knowledge of methods of testing the properties of special concretes. Deepening acquaintances of new standard nudes concerning cement concrete.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K7_U15] has advanced skills in civil engineering within offered specialization/profile	The student is able to: - design a concrete composition with special requirements, - use knowledge of techniques concreting and transport, - verify the quality of concrete using an appropriate test method.	[SU3] Assessment of ability to use knowledge gained from the subject
[K7_W15] has deep and adequate knowlege of civil engineering, within offered specialization and profile	The student knows modern concreting techniques and the possibilities of modifying the properties of concrete. The student defines the material, technological and environmental conditions of concrete durability.	[SW1] Assessment of factual knowledge

Subject contents

Concreting methods classification. Material, technological and environmental requirements for the durability of concrete. The classification of the equipment to production, transport, laying and thickening of the concrete mix. Concrete forming. Design and execution requirements for selected special concretes: lightweight concretes, architectural concretes, SCC concretes, high-strength concretes, fibro-concrete. Pomp concrete and shotcrete. Concreting in low and high temperatures.

Prerequisites and co-requisites

Knowledge of the underlying technology of concrete and concrete techniques .

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Semester dissertation	100.0%	100.0%

Recommended reading

Basic literature	1. Neville A. M. 'Properties of Concrete'
Supplementary literature	1. Collepardi M. 'New Concrete'
eResources addresses	Adresy na platformie eNauczanie:

Example issues/ example questions/ tasks being completed	1. Describe the type of light-weight concrete components , requirements for . Quality components , workmanship , features concrete , care. 2. Replace procedures when laying concrete under water. 3. Identify and describe the types of exposure classes of concrete.
Work placement	Not applicable

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