



Subject card

Subject name and code	Concret Technology, PG_00051856						
Field of study	Coastal and Offshore Engineering, Coastal and Offshore Engineering						
Date of commencement of studies	February 2022	Academic year of realisation of subject			2022/2023		
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			3.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Katedra Wytrzymałości Materiałów -> Faculty of Civil and Environmental Engineering						
Name and surname of lecturer (lecturers)	Subject supervisor		dr inż. Marzena Kurpińska				
	Teachers		mgr inż. Lucyna Grabarczyk				
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	30.0	0.0	0.0	0.0	0.0	30
	E-learning hours included: 0.0						
Technologia Betonu IMiB 2022/23 - Moodle ID: 29550 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=29550							
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	30		0.0		0.0	30
Subject objectives	Acquainting with classification and meaning features technical ingredients of concrete, concrete blends and hardened concrete, the selection of elements of concrete and establishing the yard of concrete, classification and applying concrete, basic technological processes in the production of concrete.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	K7_W01		Can make a statistical interpretation of research results.		[SW3] Assessment of knowledge contained in written work and projects		
	K7_W09		1. is able to prepare a research work plan 2. analyze the test results 3. draws conclusions		[SW3] Assessment of knowledge contained in written work and projects		
[K7_K82] is equipped to participate actively in lectures, seminars and laboratory classes conducted in foreign language		He knows the basic vocabulary of construction, building materials and concrete technology.		[SK4] Assessment of communication skills, including language correctness			
Subject contents	Genesis and definition of concrete, binder, admixtures, additives and gravel. Basic parameters of binders. Gypsum and lime binders: types and characteristics. Types and classification of cements. The components of concrete, chemical and mineral composition. Special cements. Aggregates: classification, origin and characteristics. Water for concrete mix. Admixtures and additives. Concrete mix - its consistency, workability and homogeneity. Methods of concrete design. Concrete tests and the analysis of the results. Concrete mix production. Vibration. Concrete care.						
Prerequisites and co-requisites							
Assessment methods and criteria	Subject passing criteria		Passing threshold		Percentage of the final grade		
	test		60.0%		50.0%		
	term paper		60.0%		50.0%		
Recommended reading	Basic literature		1. Neville A. M. , 'Properties of Concrete'				
	Supplementary literature		1. Collepardi M. 'New Concrete' Torino 2006 Grafiche Tintoretto				
	eResources addresses						
Example issues/ example questions/ tasks being completed	1. Discuss the properties of phase constants in the clinker. 2. Discuss the process of ordinary concrete design method 3R						

Work placement	Not applicable
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