



Subject card

Subject name and code	Devices in the Building Industry , PG_00052982						
Field of study	Chemistry in Construction Engineering						
Date of commencement of studies	February 2024	Academic year of realisation of subject			2023/2024		
Education level	second-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			4.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Department of Polymers Technology -> Faculty of Chemistry						
Name and surname of lecturer (lecturers)	Subject supervisor		prof. dr hab. inż. Janusz Datta				
	Teachers						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	0.0	30.0	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		15.0		40.0	100
Subject objectives	Overview of the main elements of construction and principles of operation of selected equipment used in the construction industry						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	K7_U12	Knows the method of selection and verification of structural elements of the device for the production of construction chemicals			[SU4] Assessment of ability to use methods and tools		
	K7_K04	Knows the rules of work of equipment for the building industry			[SK2] Assessment of progress of work		
	K7_W05	Ban choose the device for various construction works			[SW3] Assessment of knowledge contained in written work and projects		
	K7_U14	Knows the way of designing a device for the production of construction chemicals			[SU1] Assessment of task fulfilment		
Subject contents	Reactors, dissolvers, equalizers - equipment used in the production of construction chemicals; dosing and mixing units used in the manufacture of flexible raceway; equipment for pressure spray foam insulation; equipment for the production of sandwich panels; earthmoving reinforcement; earthmoving machinery; hydromechanization machines and drainage; rigs						
Prerequisites and co-requisites	Chemistry of building materials and its destiny, Fundamentals of construction equipment of construction industry						
Assessment methods and criteria	Subject passing criteria	Passing threshold			Percentage of the final grade		
	test	50.0%			50.0%		
	project	100.0%			50.0%		
Recommended reading	Basic literature	Otto, Czarnecki L., Broniewski T., Chemia w budownictwie, Wydawnictwo:Wydawnictwo Arkady, wydania:2009					
		Janicki L, Maszyny i urządzenia budowlane, Wydawnictwa Szkolne i Pedagogiczne, 1987					
	Supplementary literature	Internet pages					
	eResources addresses	Adresy na platformie eNauczanie:					

Example issues/ example questions/ tasks being completed	Describe the method of preparing the reactor used for the production of acrylic paints for operation. Discuss the operation of machines spraying polyurethane foam. What is way of pouring polymer floors on hardened ground with the use of a dosing and mixing unit.
Work placement	Not applicable