



Subject card

Subject name and code	Polymeric modifiers of building materials, PG_00039133						
Field of study	Chemistry in Construction Engineering						
Date of commencement of studies	February 2023		Academic year of realisation of subject		2023/2024		
Education level	second-cycle studies		Subject group		Optional subject group 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 Polish		
Semester of study	3		ECTS credits		2.0		
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		dr hab. inż. Lidia Jasińska-Walc				
	Teachers						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	15.0	0.0	0.0	30
	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	30		5.0		15.0	50
Subject objectives	The aim of the course is to present to the students all most important polymers which can be applied in civil engineering.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	K7_K03		The student understands the principles of sustainable development with concern for the environment.		[SK4] Assessment of communication skills, including language correctness [SK3] Assessment of ability to organize work [SK2] Assessment of progress of work [SK1] Assessment of group work skills		
	K7_U02		The student understands which types of polymers can be used in civil engineering, which properties can be achieved and how to analyze the properties of these materials.		[SU2] Assessment of ability to analyse information [SU3] Assessment of ability to use knowledge gained from the subject [SU4] Assessment of ability to use methods and tools		
	K7_W10		The student is able to select a polymeric material for basic structural purposes.		[SW3] Assessment of knowledge contained in written work and projects		
Subject contents	Polymer chemistry and technology, analysis of polymers properties, application of the polymers as construction materials, recycling.						
Prerequisites and co-requisites	Knowledge of organic and polymer chemistry, technology and properties analysis of the polymers.						
Assessment methods and criteria	Subject passing criteria		Passing threshold		Percentage of the final grade		
	test, participation in the projects and team work		60.0%		100.0%		
Recommended reading	Basic literature		1. Chemia i technologia żywic epoksydowych - Z. Bończak				
			2. Chemia polimerów - J. Pielichowski, A. Puszyński				

	Supplementary literature	Literature concerning polymers technology and application of the polymers - provided by the teacher during the course.
	eResources addresses	Adresy na platformie eNauczenie:
Example issues/ example questions/ tasks being completed	- epoxy resin, polystyrene, polyurethanes- their application in civil engineering - analysis of polymers properties	
Work placement	Not applicable	