



Subject card

Subject name and code	, PG_00065829									
Field of study	Materials Engineering									
Date of commencement of studies	October 2025	Academic year of realisation of subject		2025/2026						
Education level	second-cycle studies		Subject group		Specialty 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	1	Language of instruction		Polish						
Semester of study	2	ECTS credits		3.0						
Learning profile	general academic profile		Assessment form		assessment					
Conducting unit	Department of Polymer Technology -> Faculty of Chemistry -> Faculties of Gdańsk University of Technology									
Name and surname of lecturer (lecturers)	Subject supervisor		prof. dr hab. inż. Janusz Datta							
	Teachers		prof. dr hab. inż. Janusz Datta							
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM			
	Number of study hours	0.0	0.0	30.0	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		4.0		41.0	75			
Subject objectives	Get to know the essence of the design of industrial processes plastics. Understanding the principles of project development process and technology. Acquainted with the operation and selection of industrial equipment in engineering plastics. Knowing the mass of the main production lines plastics. Understanding the principles of operation and control of industrial installations.									
Learning outcomes	Course outcome		Subject outcome		Method of verification					
	[K7_W04] Has enhanced knowledge of materials sciences, within the scope required for describing and understanding the correlation between the chemical composition, structure and mechanical and physical properties.		Has adequate knowledge of materials and in particular is able to interpret the relationships between chemical composition, structure and mechanical and physical properties		[SW2] Assessment of knowledge contained in presentation					
	[K7_K02] Is aware of the importance of non-technical aspects and effects of engineering, including the influence on the environment and resulting responsibility for the decisions.		The student understands the responsibility from the decisions made on engineering activities and their impact on the environment		[SK2] Assessment of progress of work					
	[K7_U01] Can obtain information from literature, databases and other properly selected sources, also in English; can integrate the obtained information, interpret and draw conclusions, formulate and justify opinions		The student is able to obtain information from various sources and interpret it, draw conclusions and justify statements.		[SU2] Assessment of ability to analyse information					
Subject contents										
Prerequisites and co-requisites	General knowledge of polymer plastics. Knows the equipment and machinery used in the plastics industry, Fundamentals of heat and mass balance.									
Assessment methods and criteria	Subject passing criteria		Passing threshold		Percentage of the final grade					
	elaboration, discussion		100.0%		50.0%					
	written exam		50.0%		50.0%					

Recommended reading	Basic literature	Synoradzki L., Wisielski J. (red.): <i>Projektowanie procesów technologicznych. Od laboratorium do instalacji przemysłowej</i> , Warszawa 2006 Synoradzki L., Wisielski J. (red.): <i>Projektowanie procesów technologicznych. Bezpieczeństwo procesów chemicznych</i> , Warszawa 2012 Szarawara J., Piotrowski J.: <i>Podstawy teoretyczne technologii chemicznej</i> , Warszawa 2010 Pikoń J.: <i>Aparatura chemiczna</i> , Warszawa 1983
	Supplementary literature	Bogoczek R., Kociołek-Baławejder E.: <i>Technologia chemiczna organiczna. Surowce i półprodukty</i> , Wrocław 1992 Florjańczyk Z., Penczek S. (red.): <i>Chemia polimerów T.1. oraz T.2.</i> , Warszawa 2001 Rabek J.: <i>Współczesna wiedza o polimerach</i> , Warszawa 2008 Sikora R.: <i>Przetwórstwo tworzyw wielkocząsteczkowych</i> , Warszawa 1993
	eResources addresses	
Example issues/ example questions/ tasks being completed		
Practical activites within the subject	Not applicable	

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