



Subject card

Subject name and code	Processing of Plastics, PG_00039963						
Field of study	Management and Production Engineering, Management and Production Engineering						
Date of commencement of studies	October 2020	Academic year of realisation of subject			2022/2023		
Education level	first-cycle studies	Subject group			Obligatory subject group in the field of study 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	3	Language of instruction			Polish		
Semester of study	5	ECTS credits			3.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Department of Manufacturing and Production Engineering -> Faculty of Mechanical Engineering and Ship Technology						
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Sławomir Szymański					
	Teachers	dr inż. Sławomir Szymański					
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		40.0	75	
Subject objectives	Acquiring knowledge in the field of polymer materials processing Acquiring knowledge about machines and tools used in the processing of plastics The ability to select machines and devices necessary for the production process of typical plastic products						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	K6_W06	the student has knowledge of the production technology of polymer products the student is able to design the technological process of manufacturing products from polymeric materials			[SW1] Assessment of factual knowledge [SW3] Assessment of knowledge contained in written work and projects		
	K6_U05	The student is able to design a molded part, select the material and carry out computer simulations of the injection process			[SU1] Assessment of task fulfilment		
	K6_K02	The student realizes a given topic in a team, sets goals, analyzes and designs a production stand			[SK3] Assessment of ability to organize work [SK1] Assessment of group work skills [SK2] Assessment of progress of work		

Subject contents	<p>1. Characteristics of polymeric materials</p> <p>2. Physical and chemical methods manufacture of productcalenderings from polymers</p> <p>3. Characteristics and analysis of technological processes: injecton moulding, extrusion, plastic pressing, thermoforming</p> <p>calendering,, molding plastic,, lamination</p>														
Prerequisites and co-requisites	knowledge of materials science														
Assessment methods and criteria	<table border="1"> <thead> <tr> <th data-bbox="453 486 794 517">Subject passing criteria</th> <th data-bbox="799 486 1141 517">Passing threshold</th> <th data-bbox="1145 486 1482 517">Percentage of the final grade</th> </tr> </thead> <tbody> <tr> <td data-bbox="453 524 794 555">reports</td> <td data-bbox="799 524 1141 555">60.0%</td> <td data-bbox="1145 524 1482 555">20.0%</td> </tr> <tr> <td data-bbox="453 562 794 593">test</td> <td data-bbox="799 562 1141 593">60.0%</td> <td data-bbox="1145 562 1482 593">60.0%</td> </tr> <tr> <td data-bbox="453 600 794 631">the presentation</td> <td data-bbox="799 600 1141 631">60.0%</td> <td data-bbox="1145 600 1482 631">20.0%</td> </tr> </tbody> </table>			Subject passing criteria	Passing threshold	Percentage of the final grade	reports	60.0%	20.0%	test	60.0%	60.0%	the presentation	60.0%	20.0%
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Example issues/ example questions/ tasks being completed	<p>1. Graphically represent the steps in the injection molding process</p> <p>2. Sketch lines for extrusion of pipes</p> <p>3. List the varieties of plastic casting and describe one of the methods</p>														
Work placement	Not applicable														