



Subject card

Subject name and code	Information technology in the management of production, PG_00040010						
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			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	3	Language of instruction			Polish		
Semester of study	6	ECTS credits			4.0		
Learning profile	general academic profile	Assessment form			exam		
Conducting unit	Zakład Materiałoznawstwa I Technologii Materiałowych -> Institute of Manufacturing and Materials Technology -> Faculty of Mechanical Engineering and Ship Technology						
Name and surname of lecturer (lecturers)	Subject supervisor		prof. dr hab. inż. Dionizy Czekaj				
	Teachers		dr inż. Mieczysław Siemiątkowski prof. dr hab. inż. Dionizy Czekaj				
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	30.0	15.0	0.0	60
	E-learning hours included: 0.0						
	Techniki informacyjne w zarządzaniu produkcją, W, ZJiISP, sem.06, letni 22/23 - Moodle ID: 29720 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=29720 Techniki informacyjne w zarządzaniu produkcją, L, ZJiISP, sem.06, letni 22/23 - Moodle ID: 29722 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=29722 Techniki informacyjne w zarządzaniu produkcją, P, ZJiISP, sem.06, letni 22/23 - Moodle ID: 29723 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=29723						
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	60		7.0		33.0	100
Subject objectives	The aim of the course is to acquaint students with the techniques of computer support the management of production and product development.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	K6_U01		The student obtains the necessary information for the task from the professional literature.		[SU2] Assessment of ability to analyse information		
	K6_W05		The student has knowledge of the operation of production systems and the analysis of production processes.		[SW1] Assessment of factual knowledge		
	K6_U03		The student is able to communicate freely in the field of technical sciences, especially in the area related to management and production engineering.		[SU3] Assessment of ability to use knowledge gained from the subject		
	K6_K01		The student seeks information on modern management techniques using CAX systems.		[SK5] Assessment of ability to solve problems that arise in practice		
Subject contents	The role of IT in a modern enterprise. The state of IT management in enterprises. Optimal use of IT resources. IT risk management. Measurement of IT efficiency. Computer-aided CAD/CADD design. Models used in design. CAD programs. Methods of designing elements in the CAD system. CAD tools and directions of development. Computer-aided engineering analysis CAE. Computer-aided CAM manufacturing. Capabilities of CAD/CAM systems. CAX systems in production engineering. Presentation of selected methods of econometric analysis. Solving econometric problems using the GRETLM program						
Prerequisites and co-requisites							

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Project	100.0%	30.0%
	Written Exam	51.0%	40.0%
	Laboratory Classes	100.0%	30.0%
Recommended reading	Basic literature	1. Anil Mital, Anoop Desai, Anand Subramanian, Aashi Mital: Product development, Butterworth-Heinemann is an imprint Elsevier, 30 Corporate Drive, Suite 400, Burlington MA 01803 USA, 2008.	
	Supplementary literature	1. Meyer Kutz, Mechanical Engineers' Handbook -Manufacturing and Management, John Wiley & Sons, INC, Hoboken New Jersey, 2006	
	eResources addresses		
Example issues/ example questions/ tasks being completed	<ol style="list-style-type: none"> 1. Optimal use of IT resources 2. IT risk management 3. Measurement of IT efficiency 4. CAX systems in production engineering. 		
Work placement	Not applicable		