GDAŃSK UNIVERSITY OF TECHNOLOGY

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

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 GRETL 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 inprint 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	Adresy na platformie eNauczanie: 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, 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, W, ZJiISP, sem.06, letni 22/23 - Moodle ID: 29720 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=29720
Example issues/ example questions/ tasks being completed	1. Optimal use of IT resources 2. IT risk manage 3. ment Measurement of IT efficiency 4. CAx systems in production engineering.	
Work placement	Not applicable	