Subject card

Subject name and code	Information Technology, PG_00055182
Field of study	Mechanical Engineering

Date of commencement of studies	October 2021	Academic year of realisation of subject	2021/2022
Education level	first-cycle studies	Subject group	Obligatory subject group in the field of study
Mode of study	Part-time studies	Mode of delivery	e-learning
Year of study	1	Language of instruction	Polish
Semester of study	1	ECTS credits	2.0
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. Tadeusz Bocheński
	Teachers	dr hab. inż. Stefan Dzionk
		dr inż. Dawid Zieliński
		dr inż. Tadeusz Bocheński

Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	15.0	0.0	0.0	0.0	15
	E-learning hours included: 15.0						
	Adresy na platformie eNauczanie:						

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	15	5.0	30.0	50

Subject objectives	The basic knowledge in the area of information technology - IT.

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K6_U01] is able to acquire information from specialized literary sources, databases and other resources, essential for solving engineering tasks; is able to compile the obtained information pieces and to interpret them, additionally is able to form conclusions and present justified opinion		
	[K6_K01] is aware of the need for complementing the knowledge throughout the whole life, is able to select proper methods of teaching and learning, critically assesses the possessed knowledge; is aware of the importance of professional conduct and following the rules of professional ethics; is able to show resourcefulness and innovation in the realisation of professional projects	Skills in the use of IT techniques in the field of systems and equipment. Ability to work independently	[SK2] Assessment of progress of work

Subject contents	Formal methods of information engineering, electronic documents and digital libraries (1). Networks (1). The use of robots in industry and medicine (1). Telemedicine and e-health (2), e-business, e-manufacturing (2). Engineering and knowledge management, intelligent information services (2). The reliability and security, development of information society, electronic Infosystem (1). Reporting and Data Analysis (1). Manage relationships with internal and external customers (1). Information systems used to manage the processes of production and engineering support (2). Polish IT market, global trends in the development of information technology (1).

Prerequisites and co-requisites	Basics of informatics, Internet, ability to use MS Office		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Practical exercise	50.0%	50.0%
	Midterm colloquium	50.0%	50.0%

Recommended reading	Basic literature	1. Zarządzanie i technologie informacyjne. t. 1: komunikacja w dobie Internetu, red. Barbara Kożusznik, Wydawnictwo Uniwersytetu Śląskiego, Katowice 2004. 2. Zarządzanie i technologie informacyjne. t. 2: metody sztucznej inteligencji w zarządzaniu i sterowaniu, red. Joanna Józefowska, Wydawnictwo Uniwersytetu Śląskiego, Katowice 2005. 3. Podstawy Robotyki. Wprowadzenie do Teorii i Elementów Manipulatorów i Robotów, red. naukowy -- Morecki A., WNT, Warszawa 1998. 4. Technologie informacyjne. Zeszyty Naukowe Wydziału ETI Politechniki Gdańskiej. Od roku 2005.
	Supplementary literature	1. MSI – Manufacturing Systems Information POLSKA, miesięcznik wydawany na licencji Manufacturing Business Technology (prenumerowany na bieżąco od 2005 roku przez prowadzących zajęcia).
	eResources addresses	

Example issues/ example questions/ tasks being completed	Types of databases. Examples of relational databases. Types of CAx systems. ERP / MRP. Digital workflow documentation. Cloud computing.
Work placement	Not applicable