GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Computer aided design for Medical and Mechanical Engineering, PG_00039380
Field of study	Medical and Mechanical Engineering, Mechanical and Medical 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	5	ECTS credits	2.0
Learning profile	general academic profile	Assessment form	assessment

Conducting unit	Department of Machine Design and Vehicles -> Faculty of Mechanical Engineering and Ship Technology

Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Rafał Gawarkiewicz
	Teachers	dr inż. Rafał Gawarkiewicz

Lesson types and methods of instruction	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						
	Additional information: in the event of a pandemic - via ZOOM						

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	3.0	17.0	50

Subject objectives	The use of CAD programs in engineering analysis and design.

Learning outcomes	Course outcome	Subject outcome	Method of verification
	K6_W09	The student uses CAD program tools that use the finite element method.	[SW2] Assessment of knowledge contained in presentation
	K6_U05	The student uses CAD program tools.	[SU1] Assessment of task fulfilment
	K6_U03	The student solves partially open problems, the result of which depends on the taken assumptions and the software tools used by the student.	[SU3] Assessment of ability to use knowledge gained from the subject

Subject contents	Acquainting with CAD software: Inventor - in the scope of creating 2D and 3D technical documentation, strength analysis and searching for natural frequencies and forms of natural vibrations. Familiarization with the possibility of using predefined machine elements from the library of the programme; AutoCAD - in the field of creating 2D technical documentation. The ability to analyse of simple engineering problems using CAD software.
Prerequisites and co-requisites	Engineering graphics, Mechanics, Strength of materials, Mechanical design and basic skills of using Inventor programme.

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Test of the qualifying I	50.0%	50.0%
	Test of the qualifying II	50.0%	50.0%

Recommended reading	Basic literature	Help system of Inventor and AutoCAD programme.
	Supplementary literature	Any literature concerning Inventor and AutoCAD programme.

	eResources addresses	Adresy na platformie eNauczanie: Komputerowe wspomaganie projektowania dla IMM - L, IMM, I st., sem. VI, zima 2022-23 (PG_00039380) - Moodle ID: 27148 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=27148
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	