



Subject card

Subject name and code	Computer aided design for Medical and Mechanical Engineering, PG_00039380							
Field of study	Medical and Mechanical Engineering, Medical and Mechanical 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							
	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							
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	<p>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.</p> <p>The ability to analyse of simple engineering problems using CAD software.</p>							
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							

Example issues/ example questions/ tasks being completed	
Work placement	Not applicable