



Subject card

Subject name and code	Team Project, PG_00029983						
Field of study	Mechanical Engineering, Mechanical Engineering						
Date of commencement of studies	October 2020	Academic year of realisation of subject				2022/2023	
Education level	first-cycle studies	Subject group					
Mode of study	Part-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				assessment	
Conducting unit	Institute of Manufacturing and Materials Technology -> Faculty of Mechanical Engineering and Ship Technology						
Name and surname of lecturer (lecturers)	Subject supervisor		dr inż. Jacek Haras				
	Teachers		dr inż. Jacek Haras				
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	0.0	30.0	0.0	30
	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	30		10.0		60.0	100
Subject objectives	Collaborative project performance using concurrent engineering techniques, acquire the ability to apply techniques of CAD / CAM						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
Subject contents	Developing the structure of the process indicated. Analysis of the blank check. Modeling in a CAD parts and semi-finished fixtures. Development of the indicated operations on CNC machine tool with the use of CAM, including: selection of machine tools, the declaration of semi-finished and fixtures, selection of tools and cutting parameters for different treatments, generating tool paths, simulation processing, the program generates machining. Development of technological documentation.						
Prerequisites and co-requisites	News from the manufacturing, CAD / CAM systems						
Assessment methods and criteria	Subject passing criteria		Passing threshold		Percentage of the final grade		
	Project		60.0%		100.0%		
Recommended reading	Basic literature		1. Augustyn A.: EdgeCAM komputerowe wspomaganie wytwarzania. Helion. Gliwice 2006. 2. Chlebus E.: Techniki komputerowe CAX w inżynierii produkcji, WNT, Warszawa 2000. 3. Feld M.: Podstawy projektowania procesów technologicznych typowych części maszyn. WNT. Warszawa 2007. 4. Jaskulski A.: Współbieżne projektowanie maszyn i urządzeń, Seminarium: WNT UWM, Olsztyn 2000.				
	Supplementary literature		1. Documentation System Inventor Autodesk 2. Tools catalog CoroKey of Sandvik company.				
	eResources addresses						
Example issues/ example questions/ tasks being completed	Developing the structure of the process indicated. Analysis of the blank check. Modeling in a CAD parts and semi-finished fixtures. Development of the indicated operations on CNC machine tool with the use of CAM, including: selection of machine tools, the declaration of semi-finished and fixtures, selection of tools and cutting parameters for different treatments, generating tool paths, simulation processing, the program generates machining. Development of technological documentation.						
Work placement	Not applicable						