



Subject card

Subject name and code	Team project, PG_00057494						
Field of study	Mechanical and Medical Engineering						
Date of commencement of studies	February 2023		Academic year of realisation of subject		2023/2024		
Education level	second-cycle studies		Subject group		Optional subject group		
Mode of study	Full-time studies		Mode of delivery		at the university		
Year of study	1		Language of instruction		Polish		
Semester of study	2		ECTS credits		2.0		
Learning profile	general academic profile		Assessment form		assessment		
Conducting unit	Zakład Konstrukcji Maszyn i Inżynierii Medycznej -> Institute of Mechanics and Machine Design -> Faculty of Mechanical Engineering and Ship Technology						
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. inż. Szymon Grymek				
	Teachers		dr inż. Leszek Dąbrowski				
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		3.0		17.0	50
Subject objectives	Acquiring the ability to perform advanced design work or research or extended analysis leading to the formulation of project assumptions.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K7_U11] He/she can design and modify tools, objects and systems related to the mechanical-medical engineering by using outer technique aspects. He/she is able to choose the engineering material that can be used to apply devices. He/she is able to make a preliminary economic analysis	The student is able to implement a complex conceptual project, research task or economic and technical analysis.	[SU1] Assessment of task fulfilment
	[K7_U01] He/she is able to teach himself/herself, to acquire knowledge referring to the papers, databases and other sources, also in foreign languages, to solve engineering tasks. He/she can integrate and interpret information, to draw conclusions and justify his/ her own opinions	The student is able to integrate and interpret information, draw conclusions and justify his own opinions.	[SU2] Assessment of ability to analyse information
	[K7_K03] He/she can analyze and realize given tasks proposing entrepreneur and creative activities	The student understands the task assigned to him, and knows how to implement them effectively.	[SK5] Assessment of ability to solve problems that arise in practice
	[K7_U03] He/she can prepare an elaboration and presentation related to the general and specific engineering tasks located in Polish and foreign languages	The student is able to prepare technical documentation or a report on the research carried out.	[SU5] Assessment of ability to present the results of task
	[K7_U10] He/she can identify and describe engineering problems in the scope of mechanical-medical engineering. He/she can solve problems by choosing the proper methods and tools by assessing practical usefulness of application of new technology and techniques	The student is able to identify and solve technical problems by selecting the right tools and methods.	[SU4] Assessment of ability to use methods and tools
Subject contents	Implementation of the structural design or conceptual design of a mechanical device. / Conduct and describelaboratory tests. / Conduct and describe the analysis of the market segment for medical devices.		
Prerequisites and co-requisites	Knowledge and abilities reached during a study at particular direction.		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Participation in class	50.0%	20.0%
	Implementation of the project work	100.0%	80.0%
Recommended reading	Basic literature	According to directions of the project work tutor.	
	Supplementary literature	According to the needs of project subject.	
	eResources addresses	Adresy na platformie eNauczanie:	
Example issues/ example questions/ tasks being completed	1. Analysis of the requirements for the construction and equipment of dentistry office. 2. The conceptual design of the temporal bone holder. 3. Surgical staplers market analysis from the point of view of their applications.		
Work placement	Not applicable		