



## Subject card

Subject name and code	, PG_00056091						
Field of study	Mechanical and Medical Engineering						
Date of commencement of studies	October 2021	Academic year of realisation of subject			2023/2024		
Education level	first-cycle studies	Subject group					
Mode of study	Full-time studies	Mode of delivery			at the university		
Year of study	3	Language of instruction			Polish		
Semester of study	6	ECTS credits			1.0		
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	prof. dr hab. inż. Michał Wasilczuk					
	Teachers						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	5.0	0.0	10.0	0.0	0.0	15
	E-learning hours included: 0.0						
	Address on the e-learning platform: <a href="https://enauczanie.pg.edu.pl/moodle/course/view.php?id=14930">https://enauczanie.pg.edu.pl/moodle/course/view.php?id=14930</a>						
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	0.0		0.0		15
Subject objectives	The main objective is to demonstrate on the examples of project activities, the effectiveness of different strategies to implement a design project depending on the actual conditions of their use, the second objective is to demonstrate the practical importance of the relationship product - the user, the object environment, function - technology form, in the process of new product development as well as the importance of the forms of communication. Critical analysis and interpretation of information, formulation of critical argumentation and tangible judgments of their own.						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	[K6_U08] he/she is able to assess whether proposed methods and tools can be used in practice to solve simple engineering task related to machine design, manufacturing and utilization	not relevant			[SU4] Assessment of ability to use methods and tools		
	[K6_W13] he/she has knowledge related to application of engineering approaches in medicine or application of medical devices and rehabilitation devices	not relevant			[SW1] Assessment of factual knowledge		
	[K6_U06] he/she has skills to work in industry and follow the rules of safety regulations, he/she is able to analyze basic economics problems to delineate the direction of solution by using engineering methods	not relevant			[SU2] Assessment of ability to analyse information		
	[K6_W07] he/she is able to design, manufacture and utilize machine parts and technical devices, he/she can prepare a technical documentation	not relevant			[SW1] Assessment of factual knowledge		
Subject contents	Lectures, presentations practical exercises and tasks that perpetuate gained knowledge, discussions.						
Prerequisites and co-requisites	no restrictions						
Assessment methods and criteria	Subject passing criteria	Passing threshold			Percentage of the final grade		
	on the basis of examination tes	50.0%			100.0%		

Recommended reading	Basic literature	Ginalski J., Liskiewicz M., Seweryn J., Developing a new product, ASP, Kraków 1995.  Morris R., Product design PWN Warszawa 2009
	Supplementary literature	Kathryn Best, Design Management, PWN Warszawa 2009  Bochińska B., Ginalski J., Mamica Ł., Wojciechowska A., DM Design Management IWP Warszawa 2010  Brown T., Change by design. Libron Kraków 2013
	eResources addresses	Adresy na platformie eNauczanie:
Example issues/ example questions/ tasks being completed	Devise a concept of a device for rehabilitation	
Work placement	Not applicable	