

。 GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	, PG_00056090							
Field of study	Mechanical and Medical Engineering							
Date of commencement of studies	October 2023		Academic year of realisation of subject			2025/2026		
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	Institute of Mechanics	and Machine	Design -> Faculty of Mechanical Engineering and Ship Technology					
Name and surname	Subject supervisor		prof. dr hab. ir	nż. Michał Was	ilczuk			
of lecturer (lecturers)	Teachers							
Lesson types and methods	Lesson type	Lecture	Tutorial	Laboratory	Project	t	Seminar	SUM
of instruction	Number of study hours	0.0	0.0	15.0	0.0		0.0	15
	E-learning hours inclu	ided: 0.0		1				
Learning activity and number of study hours	Learning activity	Participation ir classes includ plan	n didactic ed in study	Participation in consultation hours		Self-study		SUM
	Number of study hours	15		0.0		0.0		15
Subject objectives	Acquiring the skills to assess the condition and wear of machine parts. Acquiring the skills to select missing/ damaged machine parts. Acquiring the skills to restore and repair used machine parts.							
Learning outcomes	Course outcome		Subject outcome			Method of verification		
	[K6_W13] he/she has knowledge related to application of engineering approaches in medicine or application of medical devices and rehabilitation devices		The student is able to choose elements of medical devices. He knows the latest market innovations in the field of wheelchair drives.			[SW3] Assessment of knowledge contained in written work and projects		
	[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		The student is able to prepare operational documentation, including measuring the necessary parameters, drawing conclusions and observations			[SU1] Assessment of task fulfilment [SU3] Assessment of ability to use knowledge gained from the subject		
	[K6_W07] he/she is able to design, manufacture and utilize machine parts and technical devices, he/she can prepare a technical documentation		the student creates technical documentation necessary to recreate the damaged part of the machine			[SW3] Assessment of knowledge contained in written work and projects		
[K6_U06] he/she has in industry and follow safety regulations, h to analyze basic ecc problems to delineat of solution by using methods		s skills to work the rules of e/she is able nomics the direction engineering	After learning about the existing structure, the student is able to fit damaged/missing parts of the machine		[SU1] Assessment of task fulfilment [SU3] Assessment of ability to use knowledge gained from the subject			
Subject contents	Laboratories:selection of an electric engine for a manual wheelchair, operation of the screw-orifice connection, experimental tests of the start-up of various types of clutches, preparation of an executive drawing of a used part of the machine based on a physical object - an executive drawing of the shaft, determination of the characteristics of a coil spring, operation of the chain block system in medical devices							
Prerequisites and co-requisites								

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade		
	laboratory report 1	50.0%	16.0%		
	laboratory report 2	50.0%	16.0%		
	laboratory report 3	50.0%	17.0%		
	laboratory report 4	50.0%	17.0%		
	laboratory report 5	50.0%	17.0%		
	laboratory report 6	50.0%	17.0%		
Recommended reading	Basic literature	Maciakowski R., Majewski W.: Sprzęgła - Wykład z podstaw Konstrukcji Maszyn z ćwiczeniami rachunkowymi. Wyd. Politechniki Gdańskiej Kochanowski M. Podstawy konstrukcji Maszyn z rysunkiem technicznym. Wyd. Politechniki Gdańskiej Kurmaz L.W., Kurmaz O.L.: Podstawy Konstruowania Węzłów i Częśc Maszyn. Wyd. Politechniki Świętokrzyskiej			
	Supplementary literature	Podstawy Konstrukcji Maszyn. Cykl monografii wydawanych przez PWN			
	eResources addresses	Adresy na platformie eNauczanie:			
Example issues/ example questions/ tasks being completed	Choose an electric motor that can be installed in a wheelchair and allows you to transport a person weighing 80 kg on slopes up to 15 degrees for 8 hours.				
Work placement	Not applicable				

Document generated electronically. Does not require a seal or signature.