



Subject card

Subject name and code	Fundamentals of Machine Design II, PG_00055397						
Field of study	Mechanical Engineering						
Date of commencement of studies	October 2022	Academic year of realisation of subject			2024/2025		
Education level	first-cycle studies	Subject group			Obligatory subject group in the field of study 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	Institute of Mechanics and Machine Design -> 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	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	2.0		18.0		50
Subject objectives	Presenting the knowledge and acquiring the skills of calculation methods used in machine design as well as practical designing of a simple mechanical device						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	[K6_U11] is able to analyse the operation of devices and compare the construction solutions applying usage, safety, environmental, economic and legal criteria	while designing, the student analyzes the operation of the device			[SU1] Assessment of task fulfilment		
	[K6_U03] is able to identify, formulate and develop the documentation of a simple design or technological task, including the description of the results of this task in Polish or in a foreign language and to present the results using computer software or other aiding tools	the completed project is in the form of documentation			[SU1] Assessment of task fulfilment		
	[K6_U07] is able to design a typical construction of a mechanical device, component or a testing station using appropriate methods and tools, adhering to the set usage criteria	student carries out the project			[SU1] Assessment of task fulfilment		
Subject contents	making technical documentation and a project of a mechanical device						
Prerequisites and co-requisites	mechanics, strength of materials, engineering drawing and drafting, Machine Design I						
Assessment methods and criteria	Subject passing criteria		Passing threshold		Percentage of the final grade		
	Project		100.0%		100.0%		
Recommended reading	Basic literature		Prezentacje do wykładów ze strony www.pg.gda.pl/~mwasilcz Wykład z Podstaw Konstrukcji Maszyn z Ćwiczeniami Rachunkowymi - skrypty PG, wyd. PG				
	Supplementary literature		Podstawy Konstrukcji Maszyn (Fundamentals of Machine Design - series of handbooks) edited by PWN Podstawy Konstrukcji Maszyn (Fundamentals of Machine Design), WNT, editor M. Osiński				
	eResources addresses						

Example issues/ example questions/ tasks being completed	design problem with graphical elements
Work placement	Not applicable