



Subject card

Subject name and code	Intermediate CDIO Project, PG_00049760						
Field of study	Power Engineering, Power Engineering						
Date of commencement of studies	October 2022	Academic year of realisation of subject				2024/2025	
Education level	first-cycle studies	Subject group				Optional subject group 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				English	
Semester of study	5	ECTS credits				3.0	
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	dr hab. inż. Jacek Łubiński					
	Teachers	dr hab. inż. Jacek Łubiński					
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	0.0	45.0	0.0	45
	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	45		3.0		27.0	75
Subject objectives	Mechanical design and CAD skills development.						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	[K6_U11] Can design and properly dimension basic foundations in hydrotechnical construction facilities; can evaluate and list the loads acting on constructions, knows the codes of modern geotechnical investigations and technologies, knows the principles of foundations and safe design of foundations of typical buildings	can obtain information from literature and other sources			[SU4] Assessment of ability to use methods and tools [SU2] Assessment of ability to analyse information [SU1] Assessment of task fulfilment		
	[K6_W10] knows the basic installations in the field of renewable energy sources and their impact on the environment	can obtain information from literature and other sources			[SW3] Assessment of knowledge contained in written work and projects [SW2] Assessment of knowledge contained in presentation		
	[K6_U02] is able to apply the learned mathematical methods to the analysis and design of elements, systems and energy systems	can obtain information from literature and other sources			[SU4] Assessment of ability to use methods and tools [SU2] Assessment of ability to analyse information [SU1] Assessment of task fulfilment		
	[K6_W09] knows the dangers of electrical devices and the principles of protection against them, has basic knowledge of heat exchangers, has basic knowledge of power equipment such as pumps, compressors, turbines, combustion engines, boilers, pipelines and their accessories and methods of their selection depending on the needs	can obtain information from literature and other sources			[SW2] Assessment of knowledge contained in presentation [SW3] Assessment of knowledge contained in written work and projects		
Subject contents	Mechanical design project including development process.						

Prerequisites and co-requisites	Any CAD software usage ability		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	project progress	60.0%	100.0%
Recommended reading	Basic literature	Autodesk Inventor User's Guide for issues 2023 and higher, or equivalent source book NX Basic Design with Teamcenter Integration - Student Guide October 2011 NX8 Siemens NX7 manual	
	Supplementary literature	FUNDAMENTALS OF 3D DESIGN AND SIMULATION - Gaetan Katamba	
	eResources addresses	Adresy na platformie eNauzanie:	
Example issues/ example questions/ tasks being completed	Existing design modification based on new requirements.		
Work placement	Not applicable		

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