



## Subject card

Subject name and code	, PG_00056304						
Field of study	Ocean Engineering						
Date of commencement of studies	October 2022	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	2	Language of instruction			Polish		
Semester of study	3	ECTS credits			5.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Institute of Ocean Engineering and Ship Technology -> Faculty of Mechanical Engineering and Ship Technology						
Name and surname of lecturer (lecturers)	Subject supervisor		dr inż. Wojciech Leśniewski				
	Teachers		dr inż. Wojciech Leśniewski mgr inż. Dominik Kreft				
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	15.0	0.0	30.0	0.0	60
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	60		10.0		55.0	125
Subject objectives	The aim is to acquiring the skills and knowledge necessary to design and make drawings of the indicated part of device using 3D software (Autodesk Inventor).						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	[K6_W08] has knowledge of the principles of sustainable development	The student knows the various possibilities of supporting the design process			[SW3] Assessment of knowledge contained in written work and projects		
	[K6_W05] has an organized knowledge on design, construction and operation of ocean technology objects and systems	Student is able to choose the optimal device solution for the intended purpose.			[SW3] Assessment of knowledge contained in written work and projects [SW2] Assessment of knowledge contained in presentation		
	[K6_W03] has a basic knowledge on hydromechanics, thermodynamics, machine construction, ecology, materials science and electronics necessary to understand the construction and operation principles of ocean technology objects and equipment	The student understands the purpose and principles of designing sample machine parts.			[SW3] Assessment of knowledge contained in written work and projects		
	[K6_U03] can use computer-aided design, production and operation tools for ocean technology objects and systems	The student knows examples of tools supporting design processes and is able to use them			[SU4] Assessment of ability to use methods and tools [SU2] Assessment of ability to analyse information [SU1] Assessment of task fulfilment		
Subject contents	Technical drawing, basics of machine construction, engineering graphics, 3d modeling						
Prerequisites and co-requisites	Knowledge of the basic principles of creating drawing documentation, technical drawing, basic knowledge of the strength of materials and mechanics.						
Assessment methods and criteria	Subject passing criteria	Passing threshold			Percentage of the final grade		
		50.0%			50.0%		
		50.0%			50.0%		

Recommended reading	Basic literature	<p>1. Rysunek techniczny w mechanice i budowie maszyn Paweł Romanowicz</p> <p>2. Rysunek techniczny Krzysztof Filipowicz, Mariusz Kuczaj, Aleksander Kowal</p> <p>3. Podstawy rysunku technicznego Jan Burcan</p> <p>4. AutoCad 2019 Pierwsze kroki Andrzej Pikoń</p> <p>5. Modelowanie w programie Solid Edge Podstawy Tomasz Gawroński</p> <p>6. Dietrich M.: Podstawy Konstrukcji Maszyn, tomy 1,2 i 3</p> <p>7. Kochanowski M.: Wybrane zagadnienia z Podstaw Konstrukcji Maszyn, skrypt PG 2002r.</p> <p>8. Dobrzański J.: Rysunek Techniczny Maszynowy</p> <p>9. Spotts M. F., Design of Machine Elements, Prentice Hall</p> <p>10. Autodesk Inventor 2014. Oficjalny podręcznik</p>
	Supplementary literature	<b>Fabian Stasiak</b> Zbiór ćwiczeń Autodesk Inventor 2018 Kurs podstawowy
	eResources addresses	
Example issues/ example questions/ tasks being completed	<p>Based on the presented examples and assumptions, design and prepare drawings and documentation of selected elements of the loading crane.</p> <p>Based on the presented examples and assumptions, design and prepare drawings and documentation of selected elements of the loading ramp crane.</p> <p>Based on the presented examples and assumptions, design and prepare drawings and documentation of selected elements of the hybrid module crane.</p> <p>Based on the presented examples and assumptions, design and prepare drawings and documentation of selected elements of the gondola's crane</p>	
Work placement	Not applicable	