GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	, PG_00056326		
Field of study	Ocean Engineering		
Date of commencement of studies	October 2021	Academic year of realisation of subject	2023/2024
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	Polish
Semester of study	6	ECTS credits	3.0
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		

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	15.0	0.0	0.0	30.0	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	5.0	25.0	75

Subject objectives

The aim is to acquiring the skills and knowledge necessary to design and make drawings of the indicated device using 3D software (Autodesk Inventor). Implemented as a supplement to design work aimed at acquiring the ability to use the software on the example of the designed ocean engineering device.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[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.	[SW2] Assessment of knowledge contained in presentation [SW3] Assessment of knowledge contained in written work and projects
[K6_U05] can formulate a simple engineering task and its specification within the range of design, construction and operation of ocean technology objects and systems	Student is able to determine the operating conditions and design assumptions for a selected machine intended for ocean engineering objects.	[SU1] Assessment of task fulfilment [SU2] Assessment of ability to analyse information [SU3] Assessment of ability to use knowledge gained from the subject [SU4] Assessment of ability to use methods and tools
[K6_W06] has an organized knowledge on engineering methods and design tools allowing the conducting of projects within the construction and operation of ocean technology objects and systems	Student is able to make calculations and documentation of the designed device based on computer tools.	[SW2] Assessment of knowledge contained in presentation [SW3] Assessment of knowledge contained in written work and projects
[K6_W08] has knowledge of the principles of sustainable development	The student understands the need to learn many design techniques.	[SW3] Assessment of knowledge contained in written work and projects

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