GDAŃSK UNIVERSITY OF TECHNOLOGY

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%

<table>
<tr><td rowspan="3">Recommended reading</td><td>Basic literature</td><td>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</td></tr>
<tr><td>Supplementary literature</td><td>Fabian Stasiak Zbiór ćwiczeń Autodesk Inventor 2018 Kurs podstawowy</td></tr>
<tr><td>eResources addresses</td><td>Adresy na platformie eNauczanie:
Komputerowe wspomaganie projektowania maszyn okrętowych, PG_0005634, C, OCE-SiUO, sem.3, zimowy 2023/24 - Moodle ID: 33712
https://enauczanie.pg.edu.pl/moodle/course/view.php?id=33712
Komputerowe wspomaganie projektowania maszyn okrętowych, PG_0005634, C, OCE-SiUO, sem.3, zimowy 2023/24 - Moodle ID: 33712
https://enauczanie.pg.edu.pl/moodle/course/view.php?id=33712</td></tr>
<tr><td>Example issues/ example questions/ tasks being completed</td><td colspan="2">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</td></tr>
<tr><td>Work placement</td><td colspan="2">Not applicable</td></tr>
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