GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Computer Aided Design of Ship Systems, PG_00060565		
Field of study	Naval Architecture and Offshore Structures		
Date of commencement of studies	October 2026	Academic year of realisation of subject	2028/2029
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	5	ECTS credits	5.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Institute of Naval Architecture -> Faculty of Mechanical Engineering and Ship Technology -> Faculties of Gdańsk University of Technology		
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Wojciech Leśniewski	
	Teachers		

Lesson types

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	15.0	0.0	0.0	45.0	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	6.0	59.0	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_U02] can work individually and in a team, communicate through various techniques in professional environment and also record, analyse, and present the results of work, can estimate the time needed to complete a given task	Formulates basic problems flow and solves them in based on laws and methods machine design and construction	[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 [SU5] Assessment of ability to present the results of task
[K6_W04] has knowledge in the field of computer science, electronics, electrical engineering, automation and control, information technology, computer graphics, useful for understanding the possibilities of their use in ocean engineering	Is able to use and develop the knowledge needed to solve a design task.	[SW1] Assessment of factual knowledge [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	He solves design problems based on computer software	[SU1] Assessment of task fulfilment [SU4] Assessment of ability to use methods and tools

Subject contents

Course content – lecture
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	
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	
Practical activites within the subject	Not applicable	

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