



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 2023	Academic year of realisation of subject			2025/2026		
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 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	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_U03] can use computer-aided design, production and operation tools for ocean technology objects and systems		He solves design problems based on computer software		[SU4] Assessment of ability to use methods and tools [SU1] Assessment of task fulfilment		
	[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.		[SW3] Assessment of knowledge contained in written work and projects [SW1] Assessment of factual knowledge		
	[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		[SU5] Assessment of ability to present the results of task [SU4] Assessment of ability to use methods and tools [SU3] Assessment of ability to use knowledge gained from the subject [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	Adresy na platformie eNauczanie:
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	