



## Subject card

Subject name and code	Contemporary Problems in Ship Construction and Technology, PG_00062677						
Field of study	Naval Architecture and Offshore Structures						
Date of commencement of studies	February 2024	Academic year of realisation of subject			2024/2025		
Education level	second-cycle studies	Subject group			Specialty 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	1	Language of instruction			Polish		
Semester of study	2	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. Jakub Kowalski				
	Teachers						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	30.0	0.0	15.0	30.0	0.0	75
	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	75		10.0		40.0	125
Subject objectives	The aim of the course is to familiarize and analyze the current structural and technological problems in shipbuilding and offshore construction.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K7_K01] Understands the need for lifelong learning, critically evaluate acquired knowledge, and comprehend the significance of knowledge in addressing cognitive and practical problems	The student is aware of the dynamically changing environment, development of knowledge and engineering tools	[SK2] Assessment of progress of work
	[K7_W06] Capable of finding and utilizing credible sources of information crucial for analyzing issues within the field of study	The student is able to verify the data obtained from various sources for its usefulness in engineering analysis	[SW1] Assessment of factual knowledge
	[K7_W02] Explains the essence and relationships of key components describing systems and processes in ocean engineering, utilizing current knowledge from major scientific fields related to the field of study	The student is able to identify cause-and-effect relationships in selected construction-technological processes in shipbuilding	[SW3] Assessment of knowledge contained in written work and projects
	[K7_U02] Presents convincing and logically justified arguments regarding outcomes through critical analysis of information in diverse technical contexts and an approach to their interpretation	The student is able to critically analyze the results obtained	[SU2] Assessment of ability to analyse information
	[K7_U01] Develops innovative strategies to solve complex and dynamic problems by synthesizing information from various sources and utilizing analytical, simulation, and experimental methods, considering environmental variability	The student is able to analyze information from various sources and make a decision based on it	[SU2] Assessment of ability to analyse information
[K7_W03] Demonstrates advanced skills in applying analytical methods and problem-solving techniques related to ocean engineering, using appropriate tools	Students can apply advanced engineering tools to solve a specific problem	[SW3] Assessment of knowledge contained in written work and projects	
Subject contents	Lecture Analysis of selected current structural and technological problems in shipbuilding  Laboratory - Participation of students in scientific (mechanical / technological) research currently carried out at the Institute  Project - Use of surface geometry in the process of hull construction		
Prerequisites and co-requisites	Knowledge of the ship's hull design and construction process		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
		60.0%	34.0%
		100.0%	33.0%
		100.0%	33.0%
Recommended reading	Basic literature	I. Lotsberg, Fatigue Design of Marine Structures. Cambridge University Press, 2016.  Y. Okumoto, Y. Takeda, M. Mano, and T. Okada, Design of Ship Hull Structures. 2009.  Bruce, George J. Eyres, David J.. (2012). Ship Construction (7th Edition), Elsevier	
	Supplementary literature	Scientific articles indicated in class Internet sources	
	eResources addresses	Adresy na platformie eNauczanie:	
Example issues/ example questions/ tasks being completed			
Work placement	Not applicable		