



Subject card

Subject name and code	, PG_00056320						
Field of study	Ocean Engineering						
Date of commencement of studies	October 2022	Academic year of realisation of subject			2024/2025		
Education level	first-cycle studies	Subject group					
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			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. Jacek Nakielski					
	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	0.0	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 of the course is to familiarize students with the structure, operation and design of modern, especially unusual, devices used in shipbuilding and the offshore industry, as well as reloading in ports.						
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		Analyzes variants of possible design solutions in terms of reliability and economics, selects and prepares documentation of drawings and technical conditions for the device user.		[SW2] Assessment of knowledge contained in presentation		
	[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		Is able to determine the nature of the working loads of the designed device and calculate stresses in important elements and structural nodes using modern computer software.		[SU1] Assessment of task fulfilment		
	[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		Distinguishes between the types used current devices their functions, construction, method of operation and can determine their usefulness in various types of systems ship, port and offshore facilities for both transshipment and exploration, research and exploitation of offshore mineral resources.		[SW1] Assessment of factual knowledge [SW3] Assessment of knowledge contained in written work and projects		

Subject contents	<p>During the lecture, students will become familiar with the function, design and principles of operation of specialized modern devices, including:</p> <ul style="list-style-type: none"> <li>- used for transport and reloading in port and at sea; containers, large objects (e.g. platforms, wind turbines), dry bulk goods (coal, gravel, sand), liquid raw materials (oil, gas),</li> <li>- used to obtain raw materials lying at the bottom of the seas and oceans, namely sands, gravels, diamonds, other polymetallic nodules, which are equipped with various types of dredgers, e.g. lift,</li> <li>- specialized equipment used in ships for laying submarine pipelines and cables, as well as in equipment of platforms and drilling ships.</li> </ul>		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	laboratory	50.0%	50.0%
	lecture	51.0%	50.0%
Recommended reading	Basic literature	-	
	Supplementary literature	-	
	eResources addresses	Adresy na platformie eNauczanie:	
Example issues/ example questions/ tasks being completed	<ol style="list-style-type: none"> <li>1. Elements of the ro-ro unit handling system.</li> <li>2. Basic types of dredgers.</li> <li>3. Methods of laying pipelines on the seabed.</li> </ol>		
Work placement	Not applicable		

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