



## Subject card

Subject name and code	Ocean Engineering Objects` Production Technology, PG_00045119						
Field of study	Ocean Engineering, Ocean Engineering						
Date of commencement of studies	October 2020		Academic year of realisation of subject		2022/2023		
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	6		ECTS credits		2.0		
Learning profile	general academic profile		Assessment form		assessment		
Conducting unit	Department of Ship Manufacturing Technology, Quality Systems and Materials Science -> Faculty of Mechanical Engineering and Ship Technology						
Name and surname of lecturer (lecturers)	Subject supervisor		dr inż. Jakub Kowalski				
	Teachers		dr inż. Jakub Kowalski				
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	30.0	0.0	0.0	0.0	0.0	30
	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	30		3.0		17.0	50
Subject objectives	The aim of the course is to familiarize with the scope of the concept of ocean engineering as an interdisciplinary field of technology dealing with the research, exploitation and exploration of seas and oceans. This concept will be included in the technological aspect.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[K6_W08] has knowledge of the principles of sustainable development		The student knows the legal regulations related to the safety aspect of operational installations in the marine environment		[SW1] Assessment of factual knowledge [SW2] Assessment of knowledge contained in presentation		
	[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		The student is able to analyze, prepare and prepare a project in terms of formal and legal terms in the field of construction and operation of ocean engineering facilities and systems		[SW1] Assessment of factual knowledge		
Subject contents	1. Technology of exploitation of mineral resources lying on the bottom or under the seabed - extraction of crude oil and natural gas, polymetallic nodules and other deposits  2. Technology of building sea vessels and their systems;3. Maritime energy - technology of building installations using sea energy4. Deep-water mining and transport devices5. Settlement and construction housing construction at sea (above and underwater)6. Protection of the marine environment against the effects of human activities7. Exploitation of ocean resources.8. The use of the ocean for military purposes.						
Prerequisites and co-requisites							
Assessment methods and criteria	Subject passing criteria		Passing threshold		Percentage of the final grade		
	Preparation of the presentation by the student		100.0%		50.0%		
	Lecture		60.0%		50.0%		

Recommended reading	Basic literature	<p>K. Mazurkiewicz: "Encyclopedia of Marine Engineering", 2009; Foundation for the Promotion of the Shipbuilding Industry and Maritime Economy; ISBN-978-83-60584-15-6</p> <p>A.Wewiórski, Z.Wesołek, J.Puchalski: "Crude oil in sea transport", 2007; Trader Publishing House, Gdynia; ISBN -978-83924549-2-1J. Cydejko, J. Puchalski, G. Rutkowski: "Offshore Ships and Technologies", 2011- Gdynia, Trader Publishing House, ISBN 978-83-62227-24-2</p>
	Supplementary literature	Magazines: ShipingWorld & Shipbuilder, The journal of ocean technology; <a href="https://www.thejot.net/">https://www.thejot.net/</a>
	eResources addresses	<p>Adresy na platformie eNauczanie:</p> <p>Technologia budowy obiektów oceanotechnicznych (098740), wykład, OCE, SiUO, 2022/23 lato - Moodle ID: 30590  <a href="https://enauczanie.pg.edu.pl/moodle/course/view.php?id=30590">https://enauczanie.pg.edu.pl/moodle/course/view.php?id=30590</a></p>
Example issues/ example questions/ tasks being completed	<p>Give the main findings of the Jamaican Convention of 1982.</p> <p>What are manganese concretions and under what conditions Poland has access to them?</p>	
Work placement	Not applicable	