



## Subject card

Subject name and code	, PG_00057309						
Field of study	Ocean Engineering						
Date of commencement of studies	February 2023	Academic year of realisation of subject			2023/2024		
Education level	second-cycle studies	Subject group			Optional subject group Subject group related to scientific research in the field of study		
Mode of study	Part-time studies	Mode of delivery			at the university		
Year of study	1	Language of instruction			Polish		
Semester of study	2	ECTS credits			2.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Faculty of Ocean Engineering and Ship Technology						
Name and surname of lecturer (lecturers)	Subject supervisor		dr inż. Roman Liberacki				
	Teachers						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	9.0	0.0	0.0	9.0	0.0	18
	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	18		4.0		28.0	50
Subject objectives	Familiarize students with the methods of assembly of the ship's propulsion system and mechanisms, devices and pipelines in marine power plants.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[K7_W06] has an organized, widened knowledge on engineering methods and design tools allowing the conducting of advanced projects within the construction and operation of ocean technology objects and systems		The student has knowledge of tools and methods useful in the process of assembling of the equipment in ship's engine room.		[SW1] Assessment of factual knowledge		
	[K7_U07] in compliance with a formulated specification and with the aid of appropriate tools and methods, is able to complete an advanced engineering task within the range of design, construction and operation of ocean technology objects and systems		Student is able to propose the technology of assembly of the ship propulsion system components, mechanisms, devices and pipelines in the machinery room.		[SU5] Assessment of ability to present the results of task		
	[K7_W05] has an organized, widened knowledge on design, construction and operation of ocean technology objects and systems		The student has knowledge in the field of technology of assembly of propulsion systems of ships and principles of layout and assembly of mechanisms and devices in the ship's engine room.		[SW1] Assessment of factual knowledge		
Subject contents	Rules for the layout of ship power plants. Determining the theoretical axis of the shaft line. Installation of shaft line components. Installation of propellers on the shaft. Transportation and assembly of main engines and transmission gears in an engine room. Ship pipelines. Methods of production of pipeline's sections. Assembly, fixing, connection of pipelines on the ship. Welding of pipelines and protection against corrosion. Tests of pipelines, fittings and pressure vessels. Thermal insulation on ships. Plastics applications. Testing and acceptance tests - machine part.						
Prerequisites and co-requisites	Knowledge from the subject: ship power plants.						
Assessment methods and criteria	Subject passing criteria		Passing threshold		Percentage of the final grade		
	Project presentation		100.0%		50.0%		
	Written test		50.0%		50.0%		

Recommended reading	Basic literature	<ol style="list-style-type: none"> <li>1. Doerffer J.: Organizacja produkcji w stoczni. Wydawnictwo Morskie. Gdańsk, 1971 r.</li> <li>2. Doerffer J.: Technologia wyposażania statków. Wydawnictwo Morskie. Gdańsk, 1975 r.</li> <li>3. Szarejko J.: Poradnik instalatora rurociągów okrętowych. Wydawnictwo Morskie. Gdańsk, 1985 r.</li> <li>4. Piaseczny L. Technologia polimerów w remontach okrętów. Gdańskie Towarzystwo Naukowe. Gdańsk 2002.</li> <li>5. PRS: Przepisy klasyfikacji i budowy statków morskich.</li> </ol>
	Supplementary literature	Technical and operational documentation of ship machinery and equipment.
	eResources addresses	Adresy na platformie eNauczanie:
Example issues/ example questions/ tasks being completed	<p>Perform and present a project in the field of assembly of the ship power plant.</p> <p>Discuss the principles of assembly of components of the ship propulsion system.</p>	
Work placement	Not applicable	