GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Ship Power Plant Technology, PG_00057236		
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	Full-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	15.0	0.0	0.0	0.0	15.0	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	4.0	16.0	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_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
[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

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
Presentation	100.0%	50.0%
Written test	50.0%	50.0%

Recommended reading	Basic literature	1. Doerffer J.: Organizacja produkcji w stoczni. Wydawnictwo Morskie. Gdańsk, 1971 r. 2. Doerffer J.: Technologia wyposażania statków. Wydawnictwo Morskie. Gdańsk, 1975 r. 3. Szarejko J.: Poradnik instalatora rurociągów okrętowych. Wydawnictwo Morskie. Gdańsk, 1985 r. 4. Piaseczny L. Technologia polimerów w remontach okrętów. Gdańskie Towarzystwo Naukowe. Gdańsk 2002. 5. PRS: Przepisy klasyfikacji i budowy statków morskich.
	Supplementary literature	Technical and operational documentation of ship machinery and equipment.
	eResources addresses	Adresy na platformie eNauczanie:
Example issues/ example questions/ tasks being completed	Perform and give a presentation in the field of assembly of the ship power plant. Discuss the principles of assembly of components of the ship propulsion system.	
Work placement	Not applicable	