GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Designing of Ship Power Plants, PG_00058884		
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	
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	Institute of Ocean Engineering and Ship Technology -> Faculty of Mechanical Engineering and Ship Technology		
Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. inż. Damian Bocheński	
	Teachers		

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	0.0	0.0	0.0	30.0	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	0.0	0.0	30

Subject objectives

Familiarize the student with the basics of designing a ship's power plant

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K7_U06] when forming and solving design tasks can see their non-technical aspects, including environmental, economical and legal ones. Applies HSE rules and regulations	The student is able to apply the learned methods in solving ship power plant design problems	[SU1] Assessment of task fulfilment
[K7_W07] has knowledge on the development perspectives of ocean technology objects and systems, knows the newest and most relevant achievements in ocean technology	The student knows about the need to decarbonize water transport	[SW3] Assessment of knowledge contained in written work and projects
[K7_W05] has an organized, widened knowledge on design, construction and operation of ocean technology objects and systems	The student knows how to create elements of a ship's power plant project	[SW1] Assessment of factual knowledge

Subject contents

Creating a list of gyms of similar units. Selection of the main engine and drive system components. Selection of generating sets. Selection of auxiliary boilers. Design of installations: cooling water, lubricating oil, fuel oil, starting air, exhaust gas. Arrangement machines, devices and tanks in the engine room.

Prerequisites and co-requisites

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
project	100.0%	100.0%

Recommended reading

Basic literature	1.Woud H.K., Stapersma D.: Design of Propulsion and Electric Power Generation Systems. IMarEST, London 2003 2. Jamroż J., Wieszczeczyński T.,Swolkień T.: Projektowanie siłowni okrętowych. PG, Gdańsk, 1997. 3. Michalski R.:Siłownie okrętowe. PSz, Szczecin, 1987. 4. Wojnowski W.:Okrętowe siłownie spalinowe. Część III.Gdańsk, 1992. 5. PRS: Przepisy klasyfikacji i budowy statków morskich.
Supplementary literature	.
eResources addresses	Adresy na platformie eNauczanie:

Example issues/ example questions/ tasks being completed	
Work placement	Not applicable