



## 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. Jamroz J., Wieszczyński 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