



Subject card

Subject name and code	, PG_00056309						
Field of study	Ocean Engineering						
Date of commencement of studies	October 2022		Academic year of realisation of subject		2024/2025		
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	5		ECTS credits		2.0		
Learning profile	general academic profile		Assessment form		assessment		
Conducting unit	Department of Theory and Ship Design -> Faculty of Mechanical Engineering and Ship Technology						
Name and surname of lecturer (lecturers)	Subject supervisor		dr inż. Maciej Reichel				
	Teachers						
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	To acquaint students with of ship power plants specialization with selected problems in the field of creating the initial ship design based on the design requirments set by the shipowner.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[K6_W08] has knowledge of the principles of sustainable development		The knowledge in question justifies the optimization approach to the design of ships in order to minimize the pollution of the atmosphere proportional to the installed power of the engine room.		[SW1] Assessment of factual knowledge		
	[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		Acquiring knowledge about the methods of determining some design parameters of ships at the initial stages of design.		[SW1] Assessment of factual knowledge		
Subject contents	Main design parameters of the ship - nomenclature and defining terms; Design spiral; Presentation of classic sets of design assumptions; functional types of ships; The issue of determining the values of the design parameters of the steering-propulsion system of a transport vessel: Manoeuvring safety of ships.						
Prerequisites and co-requisites	In the initial semesters, the student completed the knowledge of the basics of ship design.						
Assessment methods and criteria	Subject passing criteria		Passing threshold		Percentage of the final grade		
	Written credit 100%		60.0%		100.0%		
Recommended reading	Basic literature		Jan P. Michalski, Fundamentals of ship design theory; Gdańsk University of Technology Publishing House; Gdansk 2013.				
	Supplementary literature		Discussed during classes with students.				
	eResources addresses		Adresy na platformie eNauczanie:				
Example issues/ example questions/ tasks being completed	For the given values of the drive system parameters, estimate the efficiency of the propeller using the graphs of B. Wageningen.						

Work placement	Not applicable
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