



Subject card

Subject name and code	, PG_00056301						
Field of study	Ocean Engineering						
Date of commencement of studies	October 2021	Academic year of realisation of subject				2023/2024	
Education level	first-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	3	Language of instruction				Polish	
Semester of study	6	ECTS credits				3.0	
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 inż. Michał Krężelewski				
	Teachers		dr inż. Michał Krężelewski mgr inż. Hanna Pruszeko				
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	5.0		40.0	75	
Subject objectives	The student recognizes manoeuvring abilities of modern ships. Knows ship steering devices. Sizing and calculates ship propeller and rudder.						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	[K6_U06] in compliance with a formulated specification and with the aid of appropriate tools and methods, is able to complete a simple engineering task within the range of design, construction and operation of ocean technology objects and systems	Designs the propeller and rudder			[SU3] Assessment of ability to use knowledge gained from the subject		
	[K6_W05] has an organized knowledge on design, construction and operation of ocean technology objects and systems	Designs the propeller and rudder			[SW3] Assessment of knowledge contained in written work and projects		
	[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	Designs the propeller and rudder			[SW3] Assessment of knowledge contained in written work and projects		
	[K6_K03] understands non-technical aspects and effects of operation as an engineer, its influence on the environment and is aware of the responsibilities for the decisions taken	Designs the propeller and rudder			[SK5] Assessment of ability to solve problems that arise in practice		

Subject contents	Hydrodynamic characteristics of a ship propeller. The maneuvering abilities of the ship. Modern steering devices. Selection and calculation of serial propellers and classic rudders.		
Prerequisites and co-requisites	Ship Motion Mechanics I		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	project	100.0%	100.0%
Recommended reading	Basic literature	Dudziak Jan Teoria okrętu, Gdańsk 2008 Wełnicki Wiesław Mechanika ruchu okrętu, skrypt PG, Gdańsk 1989 Wełnicki Wiesław Sterowność okrętu, PWN Warszawa 1966 Molland Anthony The Marine Engineering Reference Book - a Guide to Ship design, construction and operation, Essevier 2008 Molland Anthony, Turnock Stephen Marine Rudders and Control Surfaces, Elsevier 2007	
	Supplementary literature	Krężelewski Mieczysław Hydromechanika ogólna i okrętowa cz.II skrypt PG Gdańsk 1982	
	eResources addresses	Adresy na platformie eNauczanie:	
Example issues/ example questions/ tasks being completed			
Work placement	Not applicable		