



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 2008Wełnicki Wiesław Mechanika ruchu okrętu, skrypt PG, Gdańsk 1989Wełnicki Wiesław Sterowność okrętu, PWN Warszawa 1966Molland Anthony The Marine Engeeniring Refarence Book - a Guide to Ship design, construction and operation, Essevier 2008Molland Anthony, Turnock Stephen Marine Rudders and Control Sufraces, 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		