



Subject card

Subject name and code	, PG_00041854						
Field of study	Ocean Engineering, Ocean Engineering						
Date of commencement of studies	October 2020		Academic year of realisation of subject		2022/2023		
Education level	first-cycle studies		Subject group		Optional subject group Subject group related to scientific research in the field of study		
Mode of study	Part-time studies		Mode of delivery		at the university		
Year of study	3		Language of instruction		Polish		
Semester of study	5		ECTS credits		3.0		
Learning profile	general academic profile		Assessment form		assessment		
Conducting unit	Department of Hydromechanics and Hydroacoustics -> Faculty of Mechanical Engineering and Ship Technology						
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. inż. Paweł Dymarski				
	Teachers		dr inż. Ewelina Ciba				
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	0.0	20.0	0.0	20
	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	20		5.0		50.0	75
Subject objectives	The aim of the course is to acquire the ability to create and use the Bonjean scale and the characteristics of the ship's righting moment						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[K6_W05] has an organized knowledge on design, construction and operation of ocean technology objects and systems		Can read and use the Benjean Scale and righting moment characteristics for lateral tilt		[SW3] Assessment of knowledge contained in written work and projects		
	[K6_U02] can work individually and in a team, communicate through various techniques in professional environment and also record, analyse, and present the results of work, can estimate the time needed to complete a given task		Is able to create reports on the tasks performed and return them within the prescribed period, after prior checking and comparing the obtained results with other students.		[SU1] Assessment of task fulfilment [SU5] Assessment of ability to present the results of task		
	[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		He knows the purpose of the use of the Bonjean scale and the characteristics of the ship's righting moment at lateral heels		[SW3] Assessment of knowledge contained in written work and projects		
	[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		Can independently create the Bonjean scale and the characteristic of the righting moment for a given shape of the ship's hull		[SU4] Assessment of ability to use methods and tools [SU1] Assessment of task fulfilment [SU3] Assessment of ability to use knowledge gained from the subject		
Subject contents	Creating a table of ship ordinates based on theoretical lines Creation of the numerical form of the Bonjean scale Creation of a graphic form of the Bonjean scale Creation of the righting moment characteristics for lateral tilts						

Prerequisites and co-requisites	Possession of theoretical lines of the vessel designed as part of the Project Work I subject		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Assignment I	50.0%	40.0%
	Assignment II	50.0%	60.0%
Recommended reading	Basic literature	Jan Dudziak " Teoria Okrętu" Oficyna Morska, Gdańsk 1988	
	Supplementary literature	Levis E. V., Principles of Naval Architecture, Vol. 1: Stability and Strength, SNAME 1988	
	eResources addresses	Adresy na platformie eNauczanie:	
Example issues/ example questions/ tasks being completed	Determine the volume of the submerged part and the position of the ship's center of buoyancy for the selected waterline Plot the righting moment characteristics with lateral tilts		
Work placement	Not applicable		