



Subject card

Subject name and code	, PG_00058965						
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	Part-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	Department of Ship Manufacturing Technology, Quality Systems and Materials Science -> Faculty of Mechanical Engineering and Ship Technology						
Name and surname of lecturer (lecturers)	Subject supervisor		dr inż. Maciej Reichel				
	Teachers		dr inż. Maciej Reichel				
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	0.0	18.0	0.0	18
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	18		0.0		0.0	18
Subject objectives	Conducting the analysis of the dynamic positioning ability of the selected vessel.						
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	Student takes all necessary aspects into consideration during DP analyses.			[SU2] Assessment of ability to analyse information		
	[K7_W06] has an organized, widened knowledge on engineering methods and design tools allowing the conducting of advanced projects within the construction and operation of ocean technology objects and systems	Student uses advanced tools for DP capability analyses.			[SW3] Assessment of knowledge contained in written work and projects		
	[K7_W07] has knowledge on the development perspectives of ocean technology objects and systems, knows the newest and most relevant achievements in ocean technology	Student can evaluate present and future rules and regulations, which influence the DP issues.			[SW3] Assessment of knowledge contained in written work and projects		
Subject contents	Preparation of DP analysis. Analysis of the influence of the environment on the behavior of the ship. Analysis of the operation of thrusters in the DP issue with their limitations.						
Prerequisites and co-requisites	Ship hydrodynamics. Seakeeping abilities Ship Motion Mechanics II						
Assessment methods and criteria	Subject passing criteria		Passing threshold		Percentage of the final grade		
			100.0%		100.0%		

Recommended reading	Basic literature	<p>The International Marine Contractors Association, Specification for DP capability plots, IMCA M 140 Rev. 1, June 2000.</p> <p>Faltinsen, O. M., Sea Loads on Ships and Offshore Structures, Cambridge University Press 1990.</p> <p>Reichel, M. Hydromechaniczne aspekty projektowania statków z napędem azymutalnym, Wydawnictwo PG, 2019</p> <p>Blendermann W. Wind loads on moored and manoeuvring vessels. Proceedings 12th International Conference on Offshore Mechanics and Arctic Engineering (OMAE), New York: ASME, 1993, v1, p. 183.</p>
	Supplementary literature	Brix, J. (editor), Manoeuvring Technical Manual, Seehafen Verlag, 1993
	eResources addresses	
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	