



Subject card

Subject name and code	Ship Structure 2, PG_00045051						
Field of study	Ocean Engineering, Ocean Engineering						
Date of commencement of studies	October 2020		Academic year of realisation of subject		2021/2022		
Education level	first-cycle studies		Subject group				
Mode of study	Full-time studies		Mode of delivery		at the university		
Year of study	2		Language of instruction		Polish		
Semester of study	4		ECTS credits		3.0		
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 hab. inż. Tomasz Mikulski				
	Teachers		dr inż. Marian Bogdaniuk				
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	30.0	15.0	0.0	0.0	0.0	45
	E-learning hours included: 0.0						
	Adresy na platformie eNauczanie:						
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	45		5.0		25.0	75
Subject objectives	To give students basic information related to design of fast crafts hulls, design of off-shore objects, design of ship cranes foundations,hatch covers, hulls of yachts and requirements of IACS Common structural Rules for Bulk carriers and Oil Tankers.						
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		The student is able to apply the known methods of structure analysis and verify correctness of the solution.		[SW1] Assessment of factual knowledge [SW3] Assessment of knowledge contained in written work and projects		
	[K6_U05] can formulate a simple engineering task and its specification within the range of design, construction and operation of ocean technology objects and systems		The student is able to define the structural system of a given object and indicate the main and secondary load-bearing elements of the structure.		[SU2] Assessment of ability to analyse information [SU3] Assessment of ability to use knowledge gained from the subject		

Subject contents	Floating docks.		
	Hulls of fast vessels.		
	Self-elevating and semi-submersible platforms.		
	Foundations of ship cranes.		
	Hatch covers.		
	Stern and bow doors of Ro-Ro ships.		
	Hulls of yachts.		
	Common Structural IACS Rules for bulk carriers and tankers.		
Prerequisites and co-requisites	Student should have basic knowledge on theory of ships, technical mechanics, design materials, technical drawings and lectures on ship structures from semesters III and IV.		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	test (in written form)	60.0%	100.0%
Recommended reading	Basic literature	As above (in Polish) and:.	
		1. Polski Rejestr Statków, Rules for Classification and <i>Construction of Sea-going Ships,,Part.II Hull</i> , Gdańsk, 2011. 2. Polski Rejestr Statków, Rules for Classification and <i>Construction of Sea-going Ships,,Part.III Hull Equipment</i> , Gdańsk, 2007. 3. Polski Rejestr Statków, Rules for Classification and <i>Construction of Yachts</i> . 4. Det Norske Veritas, <i>Ruleet for Classification of Mobile Offshore Units</i> . 5. IACS, Common Structural Rules for Bulk Carriers, 2006. 6. IACS, Common Structural Rules for Bulk Tankers, 2006.	
	Supplementary literature	1. Det Norske Veritas, <i>Ruleet for Classification of Mobile Offshore Units</i> . S.Wewiórski, <i>Wyposażenie kadłuba okrętowego</i> , Wydawnictwo Morskie, Gdańsk, 1971. 2. S.Wewiórski, <i>Wyposażenie kadłuba okrętowego</i> , Wydawnictwo Morskie, Gdańsk, 1971. 3. IACS, Common Structural Rules for Bulk Carriers and Oil Tankers, 2014.	
	eResources addresses		

Example issues/ example questions/ tasks being completed	<p>Present a typical structure:</p> <ul style="list-style-type: none"> - hull of a fast craft; - foundation of a ship crane; - hatch cover; - steel hull of a yacht; - hull and legs of a self-elevating unit.
Work placement	Not applicable