

Subject card

Subject name and code	Manufacturing of Metal Hull, PG_00061842								
Field of study	Design and Construction of Yachts								
Date of commencement of studies	October 2025		Academic year of realisation of subject			2027/2028			
Education level	first-cycle studies		Subject group						
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			8.0			
Learning profile	general academic profile		Assessment form			exam			
Conducting unit	Institute of Naval Architecture -> Faculty of Mechanical Engineering and Ship Technology -> Wydziały Politechniki Gdańskiej								
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. inż. Karol Niklas						
	Teachers								
Lesson types and methods	Lesson type	Lecture	Tutorial	Laboratory	Projec	t	Seminar	SUM	
of instruction	Number of study hours	45.0	0.0	15.0	30.0		0.0	90	
	E-learning hours included: 0.0								
Learning activity and number of study hours	Learning activity	Participation in classes include plan		Participation in consultation hours		Self-study		SUM	
	Number of study hours	90	0.0		0.0		90		
Subject objectives	Gain knowledge of selected issues in the design and manufacture of waterborne means of transport. In particular issues in the area of metal yacht manufacturing technology.								
Learning outcomes	Course outcome		Subject outcome			Method of verification			
	[K6_U04] has skills that allow for self-education and preparation for work in an industrial environment, including the application of occupational health and safety rules		Ability to solve selected engineering problems related to the construction of yachts.			[SU4] Assessment of ability to use methods and tools			
	[K6_W02] has knowledge in the field of technical mechanics, fluid mechanics, strength of materials, necessary to understand the basic physical phenomena occurring in ocean engineering					[SW2] Assessment of knowledge contained in presentation [SW1] Assessment of factual knowledge [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		Ability to work individually and in teams to achieve the desired design goal related to yacht structure design.			[SU1] Assessment of task fulfilment			
Subject contents	Selected issues related to the design of yacht structures concerning materials, technological processes, manufacturing technology. Spatial division of structures. Technologies of joining, transportation, launching. Aspects of equipment, maintenance, modernization, recycling.								
Prerequisites and co-requisites				· , ,					
Assessment methods and criteria	Subject passing criteria		Passing threshold			Percentage of the final grade			
	project		50.0%			50.0%			
	colloquium	50.0%			50.0%				

Recommended reading	Basic literature	 Bruce, George J.; Eyres, David J., Ship Construction (7th Edition), ISBN: 978-0-08-097239-8, Elsevier 2012 Mathers G., The welding of aluminium and its alloys. ISBN-10: 1855735679 ISBN-13: 9781855735675 Norrish J., Norrish J. , Advanced Welding Processes (New Manufacturing Processes & Materials), ISBN-10: 0852743254, ISBN-13: 978-0852743256, Springer; 1993 Publikacje Towarzystw Klasyfikacyjnych. 			
	Supplementary literature	 Bruce, George J.; Eyres, David J., Ship Construction (7th Edition), ISBN: 978-0-08-097239-8, Elsevier 2012 Mathers G., The welding of aluminium and its alloys. ISBN-10: 1855735679 ISBN-13: 9781855735675 Norrish J., Norrish J. , Advanced Welding Processes (New Manufacturing Processes & Materials), ISBN-10: 0852743254, ISBN-13: 978-0852743256, Springer; 1993 Publikacje Towarzystw Klasyfikacyjnych. 			
	eResources addresses				
Example issues/ example questions/ tasks being completed	Materials used in the construction of metal hulls.2. Production technology of metal hull of a yacht.3. Design of metal yacht structure.4. Selected technological aspects related to the construction, repair, modernization of metal yacht hulls.5. Modern computer software supporting the process of yacht structure design.				
Work placement	Not applicable				

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