



## Subject card

Subject name and code	Shipbuilding Technology, PG_00060546						
Field of study	Naval Architecture and Offshore Structures						
Date of commencement of studies	October 2023	Academic year of realisation of subject			2025/2026		
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	5	ECTS credits			8.0		
Learning profile	general academic profile	Assessment form			exam		
Conducting unit	Faculty of Mechanical Engineering and Ship Technology						
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Jakub Kowalski					
	Teachers						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	30.0	0.0	30.0	30.0	0.0	90
	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	90		9.0		101.0	200
Subject objectives	To consolidate and expand the knowledge of steel hull construction. Intermediate objectives: familiarization with: frame processes of hull technology, production organization, quality control						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	[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	The student understands the physical phenomena occurring in the manufacturing process of the ship's hull. He can consider their influence on the process of construction and assembly of the structure			[SW3] Assessment of knowledge contained in written work and projects		
	[K6_W03] has knowledge of hydromechanics, thermodynamics, machine design, ecology, materials science necessary to understand the principles of construction and operation of ocean engineering facilities and equipment	The student has a structured knowledge of the process of building a steel ship hull			[SW1] Assessment of factual knowledge		
	[K6_K02] can work in a team, assuming various roles, can act in a rational and ethical way	The student is able to derive conclusions based on information from his collaborators.			[SK2] Assessment of progress of work		
Subject contents	Lecture General characteristics of the shipbuilding process. Life cycle of a ship. Stages of ship construction and characteristic processes associated with them.  Laboratory Measurements performed from the shipbuilding process  Project 1. development of the technology of the frame flat section. 2. preparation of a general construction schedule for the selected vessel on the basis of mass indicators for the ship's steel hull structure						

Prerequisites and co-requisites	Topics covered in the subjects of the group: - material science (structural materials) - welding - mechanics - strength of materials		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
		60.0%	40.0%
		100.0%	30.0%
		100.0%	30.0%
Recommended reading	Basic literature	<p>Polish Ship Register, Rules for ship construction, part II - hull (The most recent release is available on <a href="http://www.prs.pl">www.prs.pl</a>)</p> <p>Polish Ship Register, Rules for ship construction, part IX - Materials and welding (The most recent release is available on <a href="http://www.prs.pl">www.prs.pl</a>)</p> <p>Polish Ship Register, Publication 07/P Shipbuilding and repair quality standards (The most recent release is available on <a href="http://www.prs.pl">www.prs.pl</a>)</p> <p>Lamb, Thomas. (2003 - 2004). Ship Design and Construction, Volumes 1-2; Society of Naval Architects and Marine Engineers (SNAME). The book is available in Knovel database (entrance via GUT library site)</p> <p>Bruce, George J. Eyres, David J.. (2012). Ship Construction (7th Edition).Elsevier. The book is available in Knovel database (entrance via GUT library site)</p> <p>Doerffer J. Technologia budowy kadłubów okrętowych - in Polish</p> <p>Kozak, J. (2015). <i>Pomiary w procesie budowy kadłuba statku</i>. 1-95. - in Polish</p>	
	Supplementary literature	<p>1. materials in the form of drawings, catalogs and standards used in the industry</p> <p>2. internet sources</p>	
	eResources addresses	Adresy na platformie eNauczanie:	
Example issues/ example questions/ tasks being completed	Design of the technology of a given flat section		
Work placement	Not applicable		