GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Shipbuilding Technology, PG_00060546		
Field of study	Naval Architecture and Offshore Structures		
Date of commencement of studies	October 2026	Academic year of realisation of subject	2028/2029
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 -> Faculties of Gdańsk University of Technology		
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Jakub Kowalski	
	Teachers		

Lesson types

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_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
[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_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

Subject contents

Course content – lecture
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

<table>
<tr><td>Prerequisites and co-requisites</td><td colspan="3">Topics covered in the subjects of the group:
- material science (structural materials)
- welding
- mechanics
- strength of materials</td></tr>
<tr><td>Assessment methods and criteria</td><td colspan="3"><table><tr><th>Subject passing criteria</th><th>Passing threshold</th><th>Percentage of the final grade</th></tr><tr><td></td><td>100.0%</td><td>30.0%</td></tr><tr><td></td><td>100.0%</td><td>30.0%</td></tr><tr><td></td><td>60.0%</td><td>40.0%</td></tr></table></td></tr>
<tr><td rowspan="3">Recommended reading</td><td>Basic literature</td><td>Polish Ship Register, Rules for ship construction, part II - hull (The most recent release is available on www.prs.pl)

Polish Ship Register, Rules for ship construction, part IX - Materials and welding (The most recent release is available on www.prs.pl)

Polish Ship Register, Publication 07/P Shipbuilding and repair quality standards (The most recent release is available on www.prs.pl)

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)

Bruce, George J. Eyres, David J.. (2012). Ship Construction (7th Edition).Elsevier. The book is available in Knovel database (entrance via GUT library site)

Doerffer J. Technologia budowy kadłubów okrętowych - in Polish

Kozak, J. (2015). Pomiary w procesie budowy kadłuba statku. 1-95. - in Polish</td></tr>
<tr><td>Supplementary literature</td><td>1. materials in the form of drawings, catalogs and standards used in the industry
2. internet sources</td></tr>
<tr><td>eResources addresses</td><td></td></tr>
<tr><td>Example issues/ example questions/ tasks being completed</td><td colspan="2">Design of the technology of a given flat section</td></tr>
<tr><td>Practical activites within the subject</td><td colspan="2">Not applicable</td></tr>
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