



Subject card

Subject name and code	Ship Production Technology 2, PG_00045061						
Field of study	Ocean Engineering, Ocean Engineering						
Date of commencement of studies	October 2020		Academic year of realisation of subject		2022/2023		
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	5		ECTS credits		6.0		
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. Ryszard Pyszko				
	Teachers		dr inż. Mohamed Behilil				
			dr inż. Ryszard Pyszko				
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	30.0	0.0	15.0	30.0	0.0	75
	E-learning hours included: 0.0						
	Additional information:						
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	75		7.0		63.0	145
Subject objectives	<p>The aim is to consolidate and expand knowledge in the field of ship construction, in particular the steel hull, based on the knowledge acquired in other subjects and in the previous semester.</p> <p>Intermediate goals are: familiarization with the processes of frame hull construction technology, organization of production, determination of production efficiency, preparation of a panel (flat section) design.</p>						
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 has structured knowledge in the field of the process of the processes of building a steel hull of a ship and equipment processes		[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 develop documentation for the process of building panels (flat sections), including acceptance procedures		[SU4] Assessment of ability to use methods and tools [SU5] Assessment of ability to present the results of task		

Subject contents	<p>LECTURE</p> <p>General characteristics of the shipbuilding process. The life cycle of a ship. Planning in building a ship. Planning the construction of the ship's steel hull. Stages of building the ship's steel hull in phases. Estimating the effectiveness of ship hull construction processes. Estimation of labor intensity (Rbg) of equipment processes.</p> <p>Project based on a lecture</p> <p>Drawing up a construction schedule for a selected vessel based on mass indicators for the structure of the steel hull of the ship.</p>		
Prerequisites and co-requisites	<p>Subjects taught in the earlier years in the field:</p> <ul style="list-style-type: none"> - Material science, - Welding, - metal forming. 		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Lecture	60.0%	34.0%
	Laboratory	100.0%	33.0%
	Project	100.0%	33.0%
Recommended reading	Basic literature	<p>1. Doerffer J.: Technologia budowy kadłubów okrętowych. WM Gdynia 1971.</p> <p>2. Doerffer J.: Technologia wyposażania statków. WM Gdynia 1975.</p> <p>3. Mackiewicz W.: Osnovy technologii sudostrojenia. Leningrad 1980.</p> <p>4. Wiebeck E.: Technologie des Schiffskorperbaus. Technik Berlin 1980.</p> <p>5. Bujniewicz Z. i inni: Stopy aluminium w budownictwie okrętowym. WM Gdańsk 1971.</p> <p>6. Myśliwiec M.: Spawalnictwo okrętowe. WM Gdańsk 1971.</p> <p>7. Butnicki S.: Stale i żeliwa dla przemysłu okrętowego. WM Gdynia 1959.</p> <p>8. Kowarsch A., Żaczek Z.: Spawanie konstrukcji okrętowych w osłonie gazów. WM Gdańsk 1984.</p> <p>9. Doerffer J.: Technologia wyposażania statków. WM Gdańsk 1975.</p> <p>10. Poradnik inżyniera - Spawalnictwo. WNT Warszawa 1983.</p> <p>11. Kuzminow S.: Swarocznyje deformacji sudowych konstrukcji. Sudostrojenije 1974.</p> <p>12. Janusz W.: Obsługa geodezyjna budowli i konstrukcji. PPWK Warszawa 1971.</p> <p>13. Żurowski A.: Pomiary geodezyjne w budownictwie morskim. WM Gdańsk 1980.</p> <p>14. Mazurkiewicz B.: Encyklopedia inżynierii morskiej. WM Gdańsk 1986.</p> <p>15. Doerffer J.: Technologia remontów kadłubów okrętowych. WM Gdynia 1966.</p> <p>16. Bieńkowskij D.: Technologia sudoremonta. Transport Moskwa 1976</p>	
	Supplementary literature	<p>1. Teaching materials from the subject.</p> <p>2. Materials in the form of drawings, catalogs and standards used in the preparation of production in the shipbuilding industry.</p> <p>3. Websites</p>	
	eResources addresses	<p>Adresy na platformie eNauczanie:</p> <p>Technologia budowy okrętów II, W, OCE, sem. 05, zima 22/23 (O: 098011) - Moodle ID: 26068</p> <p>https://enauczanie.pg.edu.pl/moodle/course/view.php?id=26068</p>	

<p>Example issues/ example questions/ tasks being completed</p>	<p>Draw / discuss diagram block vessel production</p> <p>In the technology of construction of the ship - what it is: the panel (flat section), micropanels, open space section, block-section, block (unit)</p>
<p>Work placement</p>	<p>Not applicable</p>