GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Design of ocean engineering facilities, PG_00057231		
Field of study	Ocean Engineering		
Date of commencement of studies	February 2023	Academic year of realisation of subject	2023/2024
Education level	second-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	1	Language of instruction	Polish
Semester of study	2	ECTS credits	4.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Zakład Projektowania Okrętu -> Institute of Ocean Engineering and Ship Technology -> Faculty of Mechanical Engineering and Ship Technology		
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Maciej Reichel	
	Teachers	dr inż. Maciej Reichel dr inż. Tomasz Hinz	

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	0.0	0.0	30.0	30.0	0.0	60

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	60	15.0	25.0	100

Subject objectives

The aim of subject is a deepening the knowledge of design methods used in the initial design of ocean unites, in the field of hull modeling, making proof calculations and estimating performance.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K7_U05] can conduct an initial economic analysis of an investment in the range of ocean technology, indicate detailed rules of law and branch regulations	The student defines and applies the economic and safety criteria for the project.	[SU2] Assessment of ability to analyse information
[K7_U03] can conduct a detailed analysis of the obtained results and present them in the form of a technical report or presentation, also in English	The student can formulate a simple engineering task in the field of design, production and operation of ocean engineering facilities and systems. The students can analyze the results and present them in the form of a report	[SU5] Assessment of ability to present the results of task [SU3] Assessment of ability to use knowledge gained from the subject
[K7_W05] has an organized, widened knowledge on design, construction and operation of ocean technology objects and systems	The student reaches structured knowledge in the design, construction and operation of ocean engineering facilities and systems	[SW3] Assessment of knowledge contained in written work and projects
[K7_W06] has an organized, widened knowledge on engineering methods and design tools allowing the conducting of advanced projects within the construction and operation of ocean technology objects and systems	The student has an organized knowledge of engineering methods and design tools enabling the implementation of projects in the field of construction and operation of facilities and ocean engineering systems	[SW3] Assessment of knowledge contained in written work and projects

<table>
<tr><td>Subject contents</td><td>1. Analysis of the needs, requirements engineering in ocean-related market

2. Analysis of the state of the art and dominant solutions

3. Suggestions for several concepts od ocean units and choosing one to implement

4. Preliminary design (the level of detail depends on the topic)

5. Selection of tools (2D / 3D, CAD)

6. Project implementation (up to the teachers decision)

7. Public presentation of the projects</td></tr>
<tr><td>Prerequisites and co-requisites</td><td></td></tr>
<tr><td>Assessment methods and criteria</td><td>
<table>
<tr><th>Subject passing criteria</th><th>Passing threshold</th><th>Percentage of the final grade</th></tr>
<tr><td>Public presentation of the project</td><td>100.0%</td><td>25.0%</td></tr>
<tr><td>Teacher’s subjective judgement</td><td>100.0%</td><td>25.0%</td></tr>
<tr><td>Delivery of a project report</td><td>100.0%</td><td>50.0%</td></tr>
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<tr><td>Recommended reading</td><td>
<table>
<tr><td>Basic literature</td><td>According to the topic of the project, given by the teacher</td></tr>
<tr><td>Supplementary literature</td><td>According to the topic of the project, given by the teacher</td></tr>
<tr><td>eResources addresses</td><td>Adresy na platformie eNauczanie:</td></tr>
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<tr><td>Example issues/ example questions/ tasks being completed</td><td>The initial design of drilling ship</td></tr>
<tr><td>Work placement</td><td>Not applicable</td></tr>
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