GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Ship Theory 1, PG_00053544		
Field of study	Ocean Engineering, Ocean Engineering		
Date of commencement of studies	October 2020	Academic year of realisation of subject	2021/2022
Education level	first-cycle studies	Subject group	
Mode of study	Full-time studies	Mode of delivery	at the university
Year of study	2	Language of instruction	Polish
Semester of study	3	ECTS credits	2.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Institute of Ocean Engineering and Ship Technology -> Faculty of Mechanical Engineering and Ship Technology		
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Michał Krężelewski	
	Teachers	dr inż. Michał Krężelewski dr inż. Maciej Reichel mgr inż. Zbigniew Macikowski	

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	15.0	0.0	15.0	0.0	0.0	30

E-learning hours included: 0.0

Adresy na platformie eNauczanie:
Teoria Okrętu I 2021/22 - Moodle ID: 20447
https://enauczanie.pg.edu.pl/moodle/course/view.php?id=20447

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	30	0.0	0.0	30

Subject objectives

knowledge:

1) basic phenomena and issues in the field of swimming mechanics,

2) methods of determination - forecasting hydromechanical properties floating objects.

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	knowledge of: 1) principles of modeling hydromechanical phenomena, 2) essential hydromechanical reactions induced on the flowing body, 3) determining the hydromechanical resistance of a vessel floating on calm water.	[SW1] Assessment of factual knowledge [SW3] Assessment of knowledge contained in written work and projects
[K6_W08] has knowledge of the principles of sustainable development	knowledge of: 1) principles of modeling hydromechanical phenomena, 2) essential hydromechanical reactions induced on the flowing body, 3) determining the hydromechanical resistance of a vessel floating on calm water.	[SW1] Assessment of factual knowledge [SW3] Assessment of knowledge contained in written work and projects

Subject contents	**Lecture**:equations of motion of floating object ; hydromechanical surface reactions; principles of hydromechanical model tests; hydromechanical resistance of the surface vessel on calm water. **Laboratory exercises**: characteristics of regular water waving, flow around ship shapes, measurement of hydromechanical forces induced on a lifting surface, forecasting of hydromechanical resistance of a surface ship moving on calm water.		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	tests	50.0%	100.0%
Recommended reading	Basic literature	Dudziak J. ,Teoria okrętu, Gdańsk 2000, Krężelewski M., Hydromechanika okrętu, t.1 Gdańsk 1980.	
	Supplementary literature	1. Pr. zb.: Poradnik Okrętowca t.2, Wydawnictwo Morskie, Gdynia 1960. 2. Instrukcje do ćwiczen laboratoryjnych. 3. Staliński J.: Teoria okrętu, Wydawnictwo Morskie, Gdańsk 1969.	
	eResources addresses	Teoria Okrętu I 2021/22 - Moodle ID: 20447 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=20447	
Example issues/ example questions/ tasks being completed			
Work placement	Not applicable		