GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Fundamentals of ships` drives and devices , PG_00043694		
Field of study	Ocean Engineering, Ocean Engineering		
Date of commencement of studies	October 2020	Academic year of realisation of subject	2020/2021
Education level	first-cycle studies	Subject group	
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	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. Piotr Bzura	
	Teachers	dr inż. Piotr Bzura dr inż. Daniel Piątek	

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	30.0	0.0	0.0	0.0	0.0	30

E-learning hours included: 0.0

Address on the e-learning platform: https://enauczanie.pg.edu.pl/moodle/my/
Adresy na platformie eNauczanie:
Podstawy napędów i urządzeń okrętowych (O:097281) - Moodle ID: 13368
https://enauczanie.pg.edu.pl/moodle/course/view.php?id=13368
Podstawy napędów i urządzeń okrętowych (O:097281) - Moodle ID: 13368
https://enauczanie.pg.edu.pl/moodle/course/view.php?id=13368

Additional information:
Classes conducted remotely and conducted on the MS Teams platform

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	2.0	18.0	50

Subject objectives

To acquaint students with the basic information on marine propulsion systems and marine devices

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	He combines the knowledge of mechanics and physics to identify energy processes carried out in machines and devices of the ship's power plant.	[SW2] Assessment of knowledge contained in presentation
[K6_U04] has self-education skills in order to improve professional qualifications, is ready to work in industrial environment, adheres to HSE rules and regulations	Explains the functioning of the basic elements of propulsion systems and marine devices	[SU4] Assessment of ability to use methods and tools

Subject contents

Types of marine propulsion, their classification. Diesel engine solutions - direct, indirect drive. Main drive system components (gears, couplings, bearings, seals). Fundamentals of engine-propeller-hull cooperation. Ship equipment.

Prerequisites and co-requisites

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
test	50.0%	50.0%
test	50.0%	50.0%

Recommended reading	Basic literature	Balcerski A.: Siłownie okrętowe. Skrypt Politechniki Gdańskiej 1990.Górski Z., Perepeczko A.: Okrętowe maszyny i urządzenia pomocnicze. Wyd. TRADEMAR 1998.Wojnowski W.: Siłownie okrętowe. Cz I, II i III. AMW Gdynia 1999.
	Supplementary literature	*Dr C.B. Barrass: Ship Design and Performance for Masters and Mates*
	eResources addresses	Podstawy napędów i urządzeń okrętowych (O:097281) - Moodle ID: 13368 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=13368 Podstawy napędów i urządzeń okrętowych (O:097281) - Moodle ID: 13368 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=13368
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	