



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						
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Learning activity and number of study hours	Additional information: Classes conducted remotely and conducted on the MS Teams platform						
	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	<i>Dr C.B. Barrass: Ship Design and Performance for Masters and Mates</i>
	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	