



Subject card

Subject name and code	, PG_00058889						
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				
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	Zakład Siłowni Okrętowych -> 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						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	0.0	30.0	0.0	30
	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	30		0.0		0.0	30
Subject objectives	To acquaint students with the distribution, assembly and propagation of vibrations and noise of the main drive system components						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	[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 knows the construction and principle of operation of the marine components of the main propulsion system			[SW2] Assessment of knowledge contained in presentation		
	[K7_U06] when forming and solving design tasks can see their non-technical aspects, including environmental, economical and legal ones. Applies HSE rules and regulations	The student knows the possibilities of preventing the spread of vibrations and noise			[SU2] Assessment of ability to analyse information		
	[K7_W05] has an organized, widened knowledge on design, construction and operation of ocean technology objects and systems	The student knows the requirements for the assembly the main drive system machines			[SW2] Assessment of knowledge contained in presentation		
Subject contents	1 General information on marine propeller shafts 2. Influence of the hull deflections on the work of the main propulsion system components 3. Assembly of the shaft line 4. Properties of shaft lines with various propellers 5. Bearings of drive shafts 6. Assembly of main machines 7. Preventing the propagation of vibrations and noise						
Prerequisites and co-requisites							
Assessment methods and criteria	Subject passing criteria		Passing threshold		Percentage of the final grade		
	Credit		50.0%		100.0%		

Recommended reading	Basic literature	Jerzy Derfer: Ship equipment technology Konstanty Cudny: Shaft lines Leszek Piaseczny: Technologies for the repair of marine internal combustion engines Władysław Wojnowski: Ship diesel power plants
	Supplementary literature	Władysław Wojnowski: Preventing the spread of vibrations and noise in ship power plants
	eResources addresses	Adresy na platformie eNauzanie:
Example issues/ example questions/ tasks being completed	Natural and forced vibrations - basic excitations in ship conditions.	
Work placement	Not applicable	