



Subject card

Subject name and code	Fundamentals of Means of Water Transport, PG_00043726						
Field of study	Transport and Logistics, Transport and Logistics						
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 hab. inż. Damian Bocheński				
	Teachers		dr hab. inż. Damian Bocheński				
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						
	Adresy na platformie eNauczanie: Introduction to means of transport - Moodle ID: 13545 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=13545						
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 structure, properties and properties of various means of transport.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[K6_W05] has an organized knowledge on design, construction and operation of means and systems of transport		The student has ordered knowledge of the basics of construction and operation of means of transport.		[SW1] Assessment of factual knowledge		
	[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		The student is able to independently search for information on the construction and operation of means of transport.		[SU1] Assessment of task fulfilment		
Subject contents	General characteristics and classification of means of transport. Basic properties and properties of means of transport. Reciprocating combustion engines, gas turbines, steam turbines, electric motors. Drive transmission systems, gears, couplings, shafts. Motor vehicles. Breakdown of motor vehicles. Construction of motor vehicles. Trailers and semitrailers. Rolling stock: traction vehicles, wagons. Construction of traction vehicles and wagons. Planes, division of planes. Types, structure and operation of means of internal transport. Pipelines. Means of urban transport. Standardization and unification in the construction of means of transport. Directions of development of construction of means of ground and air transport.						
Prerequisites and co-requisites							
Assessment methods and criteria	Subject passing criteria		Passing threshold		Percentage of the final grade		
	Test		60.0%		100.0%		
Recommended reading	Basic literature		1. Rydzkowski W., Wojewódzka - Król K., Babis H.: Transport. PWN, Warszawa, 2008.				
	Supplementary literature		Websites and catalogs of manufacturers of means of transport.				
	eResources addresses		Introduction to means of transport - Moodle ID: 13545 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=13545				

Example issues/ example questions/ tasks being completed	1. Division of means of transport. 2. The principle of operation of a four-stroke internal combustion engine. 3. Number of passengers, flight speed, ceiling of a large passenger plane.
Work placement	Not applicable