



## Subject card

Subject name and code	Advanced transportation systems, PG_00057114						
Field of study	Transport and Logistics						
Date of commencement of studies	February 2022	Academic year of realisation of subject			2021/2022		
Education level	second-cycle studies	Subject group			Obligatory subject group in the field of study Subject group related to scientific research in the field of study		
Mode of study	Full-time studies	Mode of delivery			at the university		
Year of study	1	Language of instruction			Polish		
Semester of study	1	ECTS credits			3.0		
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. Agnieszka Maczyszyn				
	Teachers		dr inż. Agnieszka Maczyszyn				
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	0.0	30.0	0.0	45
	E-learning hours included: 0.0						
	Nowoczesne systemy transportowe, W, P, TiL, sem.01, letni 21/22 (PG_00057114) - Moodle ID: 22403 <a href="https://enauczanie.pg.edu.pl/moodle/course/view.php?id=22403">https://enauczanie.pg.edu.pl/moodle/course/view.php?id=22403</a>						
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	45	9.0		21.0	75	
Subject objectives	The aim of the course is to familiarize students with the new challenges facing transport.						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	[K7_W08] The student has a structured and extended knowledge of automation, control, management and energy efficiency in transport systems	The student can determine problems and development tendencies occurring in individual modes of transport.			[SW3] Assessment of knowledge contained in written work and projects		
	[K7_U06] The student is able to notice their non-technical aspects, including environmental, economic and legal aspects when formulating and solving project tasks. Applies the principles of occupational health and safety	The student is able to make a project of a transshipment device.			[SU1] Assessment of task fulfilment [SU2] Assessment of ability to analyse information [SU4] Assessment of ability to use methods and tools [SU5] Assessment of ability to present the results of task		
	[K7_W03] The student has extensive knowledge of: reliability and safety of transport systems and environmental protection in transport	The student knows the determinants of innovation occurring in transport.			[SW1] Assessment of factual knowledge		
Subject contents	<p>Lecture: New challenges facing transport Transport needs Transport branches - development trends and problems of enterprises Transport in the European Union Transport companies Issues of innovation and transport functioning</p> <p>Project: Execution of the design of the transshipment device involved in the transport system.</p>						

Prerequisites and co-requisites	Cargo science Basics of machine construction Engineering graphics		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Test	55.0%	50.0%
	Project	55.0%	50.0%
Recommended reading	Basic literature	<p>praca zbiorowa pod red. Wojewódzka-Król K., Załoga E., Transport nowe wyzwania, PWN, wydanie VI, Warszawa 2016</p> <p>Grzybowski L., Łączyński B., Narodzonek A., Pucjalski J., Kontenery w transporcie morskim, Trademar, Gdynia 1997</p> <p>Gostomski E., Nowosielski T., Międzynarodowy handel morski, Wydawnictwo Uniwersytetu Gdańskiego, Gdańsk 202</p>	
	Supplementary literature	Gostomski E., Nowosielski T., Ewolucja i znaczenie portów morskich w krajach Unii Europejskiej, Wydawnictwo Uniwersytetu Gdańskiego, Gdańsk 2021	
	eResources addresses		
Example issues/ example questions/ tasks being completed			
Work placement	Not applicable		