



## Subject card

Subject name and code	Means of Transport, PG_00060630						
Field of study	Transport and Logistics						
Date of commencement of studies	October 2023		Academic year of realisation of subject		2023/2024		
Education level	first-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		2.0		
Learning profile	general academic profile		Assessment form		assessment		
Conducting unit	Institute of Naval Architecture -> Faculty of Mechanical Engineering and Ship Technology						
Name and surname of lecturer (lecturers)	Subject supervisor		dr inż. Daniel Piątek				
	Teachers		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						
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	<p>Get acquainted with:</p>  <p>- structure and principle of operation; - technical parameters and environmental impact; - functioning in the transport system;</p> <p>means of transport:</p>  <p>- marine; - inland; - railway; - road; - aviation;</p>						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[K6_U05] can formulate a simple engineering task and its specification in the field of design, maintenance and operation of transport means and systems		The student is able to determine the parameters of the means of transport for the assumed transport needs		[SU1] Assessment of task fulfilment [SU4] Assessment of ability to use methods and tools		
	[K6_U06] can use appropriate methods and tools in accordance with the formulated specification; can perform a simple engineering task in the field of design, manufacture and operation of transport means and systems		The student is able to estimate the technical, economic parameters and environmental impact of the means of transport performing a transport task		[SU2] Assessment of ability to analyse information		
	[K6_W05] has established knowledge in the field of design, construction and operation of transport means and systems		The student is able to determine the tasks of the means of transport in a given transport system		[SW1] Assessment of factual knowledge		

Subject contents	<p><b>SEA VESSELS:</b></p> <ul style="list-style-type: none"> <li>- history of maritime transport;</li> <li>- types of seagoing vessels;</li> <li>- spatial division and layout of the ship;</li> <li>- hull construction;</li> <li>- propulsion system and power plant;</li> <li>- hull and deck equipment, reloading technologies;</li> </ul> <p><b>INLAND SAILING:</b></p> <ul style="list-style-type: none"> <li>- inland navigation in Poland;</li> <li>- classes of waters and inland units;</li> <li>- construction and layout of means of transport: motor barge, pushed set: pusher + pushed barge;</li> <li>- drive system and equipment;</li> </ul> <p><b>RAILWAY TRANSPORT:</b></p> <ul style="list-style-type: none"> <li>- layout of railway lines in Poland;</li> <li>- rules of railway traffic management;</li> <li>- construction and parameters of electric and diesel locomotives;</li> <li>- passenger transport: passenger cars and multiple units;</li> <li>- freight transport: freight wagons;</li> </ul> <p><b>ROAD TRANSPORT:</b></p> <ul style="list-style-type: none"> <li>- road network system in Poland;</li> <li>- hazards in road transport;</li> <li>- trends in passenger transport and their impact on the construction of motor vehicles;</li> <li>- construction of a truck: tractor unit and semi-trailer</li> <li>- development trends;</li> </ul> <p><b>AIR TRANSPORT:</b></p> <ul style="list-style-type: none"> <li>- history of aviation development;</li> <li>- necessary airport infrastructure;</li> <li>- construction of a passenger plane;</li> <li>- air transport of goods:</li> </ul>		
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	<p>Basic literature</p> <p>Więckiewicz, W.: Podstawowe informacje o statkach morskich. Podręcznik dla szkół budownictwa okrętowego. Oficyna Wydawnicza, Gdańsk, 2021. ISBN: 978-83-60584-90-3;</p> <p>Żylicz, A.: Statki śródlądowe. Wydawnictwo Morskie, Gdańsk, 1979. ISBN: 832152852X;</p> <p>Terczyński, P.: Katalog lokomotyw elektrycznych. Kolpress, Warszawa, 2017. ISBN: 978-83-943075-3-0;</p> <p>Prochowski, L., Żuchowski, A.: Samochody ciężarowe i autobusy. WKiŁ, Warszawa, 2016. ISBN: 978-83-206-2047-4;</p> <p>Kuroczycki, M., Michał Suliński, M.: Samoloty i helikoptery cywilne. Dragon, 2023. ISBN: 978-83-8274-323-4;</p>		

	Supplementary literature	<p>Grzybowski, L., Łączyński, B., Narodzonek, A., Puchalski, J.: Kontenery w transporcie morskim. Trademar, Gdynia, 1997. ISBN: 83-905412-2-X;</p> <p>Pałucha, K., Puchalski, J., Śliwiński, A.: Statki poziomego ładownia. Trademar, Gdynia, 2004. ISBN: 83-900731-1-8</p> <p>Puchalski, J., Soliwoda, J.: Eksploatacja masowców. Trademar, Gdynia, 2008. ISBN: 978-83-924540-5-2;</p> <p>Wiewióra, A., Wesolek, Z., Puchalski, J.: Ropa w transporcie morskim. Trademar, Gdynia, 2007. ISBN: 978-83-924540-2-1;</p> <p>Terczyński, P.: Katalog wagonów towarowych. Kolpress, Warszawa, 2011. ISBN: 978-83-933257-1-9;</p>
	eResources addresses	<p>Podstawowe</p> <p><a href="https://www.pkpcargo.com/media/1002903/pkp-cargo_katalog-wagonow_3008_19.pdf">https://www.pkpcargo.com/media/1002903/pkp-cargo_katalog-wagonow_3008_19.pdf</a> - PKP Cargo railway wagon catalog</p> <p><a href="https://pdf.nauticexpo.com/pdf/mac-gregor/cargo-handling-book/30588-103189.html">https://pdf.nauticexpo.com/pdf/mac-gregor/cargo-handling-book/30588-103189.html</a> - Macgregor Cargo Handling Book</p> <p>Adresy na platformie eNauczanie:</p> <p>Środki Transportu (W), TiL (PG_00060630), sem. 1, zimowy 23/24 - Moodle ID: 32847</p> <p><a href="https://enauczanie.pg.edu.pl/moodle/course/view.php?id=32847">https://enauczanie.pg.edu.pl/moodle/course/view.php?id=32847</a></p>
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	

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