



## Subject card

Subject name and code	FUNDAMENTALS OF WATER TRANSPORT SYSTEMS, PG_00044609						
Field of study	Transport						
Date of commencement of studies	October 2023		Academic year of realisation of subject		2024/2025		
Education level	first-cycle studies		Subject group		Obligatory subject group in the field of study		
Mode of study	Full-time studies		Mode of delivery		at the university		
Year of study	2		Language of instruction		Polish		
Semester of study	4		ECTS credits		4.0		
Learning profile	general academic profile		Assessment form		assessment		
Conducting unit	Department of Geotechnics, Geology and Marine Civil Engineering -> Faculty of Civil and Environmental Engineering						
Name and surname of lecturer (lecturers)	Subject supervisor						
	Teachers						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	30.0	15.0	0.0	15.0	0.0	60
	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	60		5.0		35.0	100
Subject objectives	The student is getting acquainted with the basic informations about inland and maritime navigation, hydrotechnical constructions, susatinable transport, safety of the navigation, revitalization of waterways.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[K6_W09] has basic knowledge of transport traffic engineering to understand its importance for transport operation and differentiate between how it is applied in different modes of transport		The student is able appropriately to determine priorities serving the performance of a task transport in the water transport		[SW3] Assessment of knowledge contained in written work and projects		
	[K6_U04] able to use transport terms properly and speak about a problem using modern audiovisual techniques		The student has a basic knowledge in the traffic engineering in the transport water for grasping meaning for her for functioning of the transport and diversifying applications in different branches of the transport		[SU1] Assessment of task fulfilment		
	[K6_W12] has basic knowledge of the design and construction of transport infrastructure		The student has a basic knowledge in the scope into designs and construction of the infrastructure of the water transport		[SW3] Assessment of knowledge contained in written work and projects		
	[K6_W08] understands the theoretical basis of transport processes and systems which is useful for understanding the general transport structures and transport chains		The student has a knowledge in the scope of processes and transport systems useful for understanding general structures and transport chains		[SW1] Assessment of factual knowledge		
Subject contents	Provisions, resolutions, the circulars, concerning the water transport, entities responsible for water administration (IMO), organizational structure of the water management in Poland, hydrotechnical constructions of rivers and lakes, characteristics and classification of the infrastructure of the water transport, buoyage systems, vessel traffic system, safety of the navigation, intermodal transport, maintaining the wateways and the revitalization of the inland waterways, influence of the water transport on the environment						
Prerequisites and co-requisites							

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Lecture test	60.0%	40.0%
	Presentation	60.0%	30.0%
	Project	60.0%	30.0%
Recommended reading	Basic literature	[1] Chuchla Z. Zarządzanie morskim statkiem transportowym oraz jego eksploatacja , Gdynia 2005,[2] Dz.U. 1991 nr 32 poz. 131 Ustawa z dnia 21 marca 1991 r. o obszarach morskich Rzeczypospolitej Polskiej i administracji morskiej,[3] Dz.U. 2001 nr 5 poz. 43 Ustawa z dnia 21 grudnia 2000 r. o żegludze śródlądowej,[4] Girtler J. I inni, Wybrane zagadnienia eksploatacji statków morskich w aspekcie bezpieczeństwa żeglugi Szczecin 2003,[5] Gucma S. Inżynieria ruchu morskiego, Gdańsk 2001,[6] Gucma S., Jagniszczak I. Nawigacja dla kapitanów, Fundacja Promocji PrzemysłuOkrętowego i Gospodarki Morskiej, 2006[7] Jagniszczak I. Systemy sterowania i zarządzania ruchem statków, Szczecin 2001,[8] Jagniszczak I. Systemy sterowania i zarządzania ruchem statków i barek na wodach przybrzeżnych i śródlądowych, studia nr 41, Szczecin 2003,	
	Supplementary literature	[1] Kristiansen S., Maritime Transportation: Safety Management and Risk Analysis. Elsevier,2005.[2] MSC 69/INF.14 Formal Safety Assessment, IMO, Londyn, 12.02.1998r.,[3] Niebieska Księga. Projekty transportu kombinowanego/intermodalnego.[4] Przepisy Portowe,	
	eResources addresses	Adresy na platformie eNauczanie:	
	Example issues/ example questions/ tasks being completed	What does functioning of a seaport depend on? What aims of the water management are? Replace the elements of the water dam.	
Work placement	Not applicable		