



Subject card

Subject name and code	Traffic Engineering, PG_00045217						
Field of study	Transport and Logistics, Transport and Logistics						
Date of commencement of studies	October 2020		Academic year of realisation of subject		2021/2022		
Education level	first-cycle studies		Subject group				
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		2.0		
Learning profile	general academic profile		Assessment form		assessment		
Conducting unit	Faculty of Ocean 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						
	Address on the e-learning platform: https://enauczanie.pg.edu.pl/moodle/course/view.php?id=9693 Adresy na platformie eNauczanie:						
	Inżynieria ruchu, W, TRANS, rok 2, sem 4, lato 2021-22, (PG_00045217) - Moodle ID: 17750 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=17750						
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		4.0		21.0	55
Subject objectives	- familiarization with methods to improve the efficiency and safety in the transport of water and land, - understanding of the basic principles of traffic control aquatic and terrestrial;						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[K6_W07] has a general knowledge on humanities, social and economical sciences. Knows the rules of creating the forms of personal entrepreneurship and economic activity, has knowledge on the protection of intellectual property rights and industrial property rights and copyrights		It is not a humanistic subject. The student is able to assess the structure of the transport system in terms of efficiency, ecology and safety		[SW1] Assessment of factual knowledge [SW2] Assessment of knowledge contained in presentation		
	[K6_U07] applies knowledge on humanities, social and economical science in solving problems		It is not a humanistic subject The student knows the structure and principles of operation of water and land transport systems		[SU2] Assessment of ability to analyse information [SU3] Assessment of ability to use knowledge gained from the subject		

Subject contents	<ul style="list-style-type: none">- the role of traffic engineering in various fields of transportation,- the nature of the marine environment,- rules for the organization of maritime traffic,- safety of navigation in restricted areas,- elements of the safety of the ship: the drive maneuverability, carrying cargo, navigation equipment,- inland waterways: European transport routes, class, facts, investments,- infrastructure of inland waterways, transport- pilotage waterways,- railways: European transport routes, class, investment trends,- railway infrastructure, means of transport;- principles of rail traffic, traffic control systems,- roads: European transport routes, class, investment trends,- motorways, road junctions, horizontal and vertical signage, traffic control systems,- security threats on Polish roads- ports and logistics centers: construction planning, organization;		
Prerequisites and co-requisites	Basic knowledge on the structure of means of transport		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	colloquium	60.0%	100.0%
Recommended reading	Basic literature	<p>GUCMA, S.: Inżynieria ruchu morskiego. Okrętownictwo i Żegluga. Gdańsk 2001.</p> <p>JAGNISZCZAK, I., ŁUSZNIKOW, E.: Bezpieczeństwo nawigacji. Fundacja Promocji Przemysłu Okrętowego i Gospodarki Morskiej. Gdańsk 2010.</p> <p>KOLASZEWSKI, A., ŚWIDWIŃSKI P.: Żeglarz i sternik jachtowy. Almapress, Wa-wa 2002.</p> <p>DĄBROWSKA-BAJON, M.: Podstawy sterowania ruchem kolejowym, Politechnika Warszawska, Warszawa 2002.</p> <p>CIEŚLAKOWSKI, S.: Stacje kolejowe. Wydawnictwa Komunikacji i Łączności, Wa-wa 1992.</p> <p>GACA, S., SUCHORZEWSKI, W., TRACZ, M.: Inżynieria ruchu drogowego. Teoria i praktyka. WKŁ, 2011</p> <p>KRYSTEK, R.: Węzły drogowe i autostradowe. WKŁ 2008,</p>	
	Supplementary literature	-	
	eResources addresses	Inżynieria ruchu, W, TRANS, rok 2, sem 4, lato 2021-22, (PG_00045217) - Moodle ID: 17750 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=17750	
Example issues/ example questions/ tasks being completed			
Work placement	Not applicable		