GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	, PG_00061728
Field of study	Environmental Engineering

Date of commencement of studies	October 2024	Academic year of realisation of subject	2025/2026
Education level	second-cycle studies	Subject group	Obligatory subject group in the field of study
Mode of study	Part-time studies	Mode of delivery	at the university
Year of study	2	Language of instruction	Polish
Semester of study	3	ECTS credits	3.0
Learning profile	general academic profile	Assessment form	assessment

Conducting unit	Department of Transportation Engineering -> Faculty of Civil and Environmental Engineering -> Wydziały Politechniki Gdańskiej

Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Łukasz Mejłun
	Teachers	

Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	10.0	10.0	0.0	0.0	0.0	20
	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	20	3.0	52.0	75

Subject objectives	Become familiar with the process and basic procedures and regulations for road design and pavement construction.

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K7_W02] has broadened and well-ordered knowledge of the current law on construction, water, environmental protection and planning and spatial planning.	The student will become familiar with the formal and legal system, applicable regulations and investment principles.	[SW1] Assessment of factual knowledge [SW2] Assessment of knowledge contained in presentation
	K7_W05	The student is able to select appropriate road construction technologies and organize their operation.	[SW2] Assessment of knowledge contained in presentation [SW1] Assessment of factual knowledge
	[K7_U01] can obtain information from literature, databases and other sources; can integrate the obtained information, interpret and critically evaluate them, draw conclusions, and formulate and comprehesively justify the opinions	The student is able to obtain information from literature, databases and other sources; is able to integrate the obtained information, interpret and critically evaluate it, as well as draw conclusions and formulate and exhaustively justify opinions.	[SU4] Assessment of ability to use methods and tools [SU3] Assessment of ability to use knowledge gained from the subject [SU2] Assessment of ability to analyse information

Subject contents	General conditions for the development of the road network. Principles of dimensioning of road elements - road cross-section, situational plan, longitudinal profile. Principles of designing road intersections and junctions. Principles of designing devices for pedestrians, bicycles and public transport. Road construction - basic principles of earthworks execution. Layout and functions of pavement layers. Road materials (asphalts, aggregates, asphalt mixtures). Design of pavement structures.
Prerequisites and co-requisites	

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Passing of exercises	60.0%	100.0%

Recommended reading	Basic literature	1. Basiewicz T., Gołaszewski A., Rudziński L.; Infrastruktura transportu. Politechnika Warszawska, 2007
		2. Wojewódzka-Król K., Rolbiecki R.; Infrastruktura transportu. Wyd. Uniwersytetu Gdańskiego, 2008
		3. Węzły drogowe i autostradowe. Praca pod red. Prof. R. Krystka. WKiŁ Warszawa, 20008
		4. Piłat J., Radziszewski P.: Nawierzchnie asfaltowe, WKŁ, 2004.
	Supplementary literature	1. Katalog typowych konstrukcji nawierzchni podatnych i półsztywnych. GDDKiA Warszawa, 2014.
		2. Wytyczne projektowania skrzyżowań drogowych, GDDKiA, 2001
		3. Rozporządzenie Ministra Transportu i Gospodarki Morskiej z dnia 2 marca 1999 r. w sprawie warunków technicznych jakim powinny odpowiadać drogi publiczne i ich usytuowanie
	eResources addresses	
Example issues/ example questions/ tasks being completed	no recommendatio	
Work placement	Not applicable	