

SDAŃSK UNIVERSITY 的 OF TECHNOLOGY

Subject card

Subject name and code	Roads Motorways I, PG_00049147								
Field of study	Civil Engineering								
Date of commencement of studies	October 2021		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	3		Language of instruction			Polish			
Semester of study	5		ECTS credits			3.0			
Learning profile	general academic profile		Assessment form			assessment			
Conducting unit	Department of Transportation Engineering -> Faculty of Civil and Environmental Engineering								
Name and surname of lecturer (lecturers)	Subject supervisor dr inż. Jacek Alenowicz								
	Teachers		dr inż. Marcin Stienss						
			mgr inż. Artur Ryś						
		dr inż. Łukasz Meiłun							
			dr inż Jacek Alenowicz						
			dr inż. Marcin Budzyński						
			mgr inż. Tomasz Mackun						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial Laboratory Project		t	Seminar	SUM		
	Number of study hours	30.0	0.0	0.0	15.0		0.0	45	
	E-learning hours included: 0.0								
Learning activity and number of study hours	Learning activity	Participation in classes includ plan	n didactic led in study	tic Participation in cudy consultation hours		Self-study SUM		SUM	
	Number of study hours	45		5.0		25.0		75	
Subject objectives	Getting basic knowledge on geometrical design of roads, road earthworks and pavement subsoil.								
Learning outcomes	Course outcome Subject outcome					Method of verification			
	[K6_U13] knows principles of constrution of roads and railroads; can design a section of a road and railroad; can evaluate the technical condition of a road and railroad infrastructure		Student is able to design horizontal and vertical aligment of road and choose proper crosssection						
	[K6_W09] knows the principles of determining of loads acting on basic constructions (e.g. general, industrial, bridge, water, marine, transport objects) and rules of its constructing		Student has basic knowledge concerning the influence of vehicles on road network and road pavement.						
	[K6_W15] Has knowlege of construction law and environmetal impact of investment realisation		Student gets basic knowledge concerning the conditions required of road design and location.						
	[K6_W10] Has basic knowledge on design, construction and maintenence of roads and railroads		Student has basic knowledge on geometric design of road, road earthworks and subgrade of a pavement structure						
Subject contents	Road users and vehicles. Road and motorway design process. Basic parameters for road design. Designing of cross section, vertical and horizontal alignments. Road capacity. Road safety. Earthworks - design and basic rules of execution. Road drainage.								

Prerequisites and co-requisites						
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade			
	Design of a road section	100.0%	100.0%			
Recommended reading	Basic literature Supplementary literature	 Węzły drogowe i autostradowe. Praca pod red. Prof. R. Krystka. WKiŁ Warszawa, 2008. Gaca S., Suchorzewski W., Tracz M.: Inżynieria Ruchu drogowego. Teoria i praktyk. WKŁ Warszawa 2009 Edel R., Odwodnienie dróg , WKŁ, Warszawa 2009 Wiłun Z. Zarys geotechniki, WKŁ, 2013 Głażewski M., Nowocień E., Piechowicz K. Roboty ziemne i 				
		 Warunki techniczne jakim powinny odpowiadać drogi publiczne i ich usytuowanie. Dziennik Ustaw, Warszawa 2016 				
	eResources addresses	Adresy na platformie eNauczanie:				
Example issues/ example questions/ tasks being completed						
Work placement	Not applicable					