



Subject card

Subject name and code	Roads and Streets, PG_00059956						
Field of study	Environmental Engineering						
Date of commencement of studies	February 2023	Academic year of realisation of subject			2023/2024		
Education level	second-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	1	Language of instruction			Polish		
Semester of study	2	ECTS credits			2.0		
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. Łukasz Mejłun					
	Teachers	dr inż. Łukasz Mejłun					
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	0.0	15.0	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	5.0		20.0		55
Subject objectives	The aim of the course is to familiarize students with the type and division of road pavements, materials used in road structures, their construction, and with the design of horizontal and vertical geometry of roads and streets, as well as with normal cross-sections.						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	K7_W05	The student has basic knowledge of road pavements, their types, construction, materials used and their properties, as well as the horizontal, vertical geometry and the cross-section of roads.			[SW3] Assessment of knowledge contained in written work and projects [SW2] Assessment of knowledge contained in presentation		
	[K7_W02] has broadened and well-ordered knowledge of the current law on construction, water, environmental protection and planning and spatial planning.	The student is able to obtain the necessary information from standards and guidelines, select it and use it in practice.			[SW3] Assessment of knowledge contained in written work and projects [SW2] Assessment of knowledge contained in presentation		
	[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 comprehensively justify the opinions	The student is able to obtain the necessary information from literature, standards and guidelines, select it and use it in practice.			[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 [SU1] Assessment of task fulfilment		

Subject contents	1. Types of roads. 2. Types of road pavements. 3. Road pavement structures. 4. Materials in road pavement structures. 5. The road in the horizontal plan. 6. Road in a longitudinal profile. 7. The road in cross-sections.											
Prerequisites and co-requisites												
Assessment methods and criteria	<table border="1"> <thead> <tr> <th data-bbox="454 795 794 824">Subject passing criteria</th> <th data-bbox="799 795 1139 824">Passing threshold</th> <th data-bbox="1144 795 1482 824">Percentage of the final grade</th> </tr> </thead> <tbody> <tr> <td data-bbox="454 831 794 860">design - project</td> <td data-bbox="799 831 1139 860">50.0%</td> <td data-bbox="1144 831 1482 860">34.0%</td> </tr> <tr> <td data-bbox="454 866 794 896">lecture - test</td> <td data-bbox="799 866 1139 896">50.0%</td> <td data-bbox="1144 866 1482 896">66.0%</td> </tr> </tbody> </table>			Subject passing criteria	Passing threshold	Percentage of the final grade	design - project	50.0%	34.0%	lecture - test	50.0%	66.0%
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design - project	50.0%	34.0%										
lecture - test	50.0%	66.0%										
Recommended reading	Basic literature	1.Z. Wiłun Zarys geotechniki WKŁ 2.R. Edel Odwodnienie dróg WKŁ 3.K. Błażejowski, S. Styk Technologia warstw bitumicznych WKŁ 4.J. Piłat, P. Radziszewski Nawierzchnie asfaltowe WKŁ 5.A. Szydło Nawierzchnie drogowe z betonu cementowego Polski Cement 6.Katalog Typowych Konstrukcji Nawierzchni Podatnych i Półsztywnych. 2014. PG, GDDKiA. 7.Katalog Typowych Konstrukcji Nawierzchni Sztywnych. 2014. PWr, GDDKiA. 8. Wytyczne Techniczne do projektowania dróg WR-D										
	Supplementary literature	Lecture and design presentations prepared by the course coordinator (teacher).										
	eResources addresses	Adresy na platformie eNauczanie:										
Example issues/ example questions/ tasks being completed	1. List the types of road pavements depending on the material of the wearing course.2. On what basis is the radius of a horizontal curve selected?3. What are the methods of road pavement drainage?4. In which pavement layers can recycled materials be used?											
Work placement	Not applicable											