

。 GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	, PG_00065917								
Field of study	Civil Engineering								
Date of commencement of studies	October 2022		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	Part-time studies		Mode of delivery			at the university			
Year of study	3		Language of instruction			Polish			
Semester of study	6		ECTS credits			3.0			
Learning profile	general academic profile		Assessme	ent 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. Marcin Stienss						
	Teachers		dr inż. Marcin Stienss						
			dr inż. Marcin Budzyński						
Lesson types and methods	Lesson type	Lecture	Tutorial	Laboratory	Projec	t	Seminar	SUM	
of instruction	Number of study hours	10.0	0.0	0.0	10.0		0.0	20	
	E-learning hours included: 0.0								
Learning activity and number of study hours	Learning activity Participation ir classes include plan				Self-study		SUM		
	Number of study hours	20		0.0		0.0		20	
Subject objectives	Getting basic knowled pavements.	dge on designi	ng of intersecti	ons and paven	nent stru	ctures	and on techn	ology of road	

design of pavement structure. Catalogue of typical pavement structures. Formation layer and capping layer. Road materials (bitumens, aggregates, asphalt mixes). Base layers stabilized with hydraulic binders. Unbound aggregate bases. Asphalt pavements. Prerequisites Scope of lectures and designing from the subject "Roads and Motorways I" Assessment methods and criteria Subject passing criteria Passing threshold Percentage of the final grade Project II 60.0% 30.0% Pass of lectures sem V and VI 60.0% 40.0% Recommended reading Basic literature 1. Wzorce i Standardy projektowania WRD, Ministerstwo Infrastruktury. 1. Wzorce i Standardy projektowania WRD, Ministerstwo Infrastruktury. 2. Piłat J., Radziszewski P., Nawierzchnie drogowe z betonu cementowego, Polski Cement, 2004 3. Szydo A., Nawierzchnie drogowe z betonu cementowego, Polski Cement, 2004 Supplementary literature 1. Błażejowski K., Styk S., Technologia warstw asfaltowych, WKŁ, 2009. 2. Judycki J i wsp.: Analizy i projektowanie konstrukcji nawierzchni podstrywnych. WKŁ 2014 eResources addresses Adresy na platformie eNauczanie: 2. Example usetsions/ tasks being completed e-Nauczaniu distance learning course	Learning outcomes	Course outcome	Subject outcome	Method of verification				
objects and defails, processes and paperoprise standards and methods of design. payment structure to patricular subgrade conditions and road radio. He knows the basic rules of radio parements constructions and road intersections design. [SU4] Assessment of ability to analyse information [SU3] Assessment of ability to analyse information [SU4] Assessment of factual information [SU4]		investment's impact on the environment and the interrelationships and dependencies between the building structure and the natural	demonstrates understanding of the impact of a road investment on the environment and the interconnections and dependencies between the planned road or highway and the	knowledge [SW3] Assessment of knowledge contained in written work and				
engineering structures in a sustainable maner, with care for the natural environment and a minimum carbon footprint construction in a sustainable way. Sustainable way. environment and a minimal carbon footprint [Staf] Assessment of ability to use methods and tools [SU3] Assessment of ability to use knowledge gained from the subject [K6_W03] Demonstrate knowledge and understanding of the processes, established standards and design methods in the civil engineering subject area and of their limitations. The student has the ability to distinguish the characteristics of the processes, established standards and design methods in the civil engineering subject area and of their limitations. The student has the ability to distinguish the characteristics of the basic technological processes (standards and design methods in the civil engineering subject area and of their limitations. [SW1] Assessment of factual rower structure layers and projects Subject contents Road facilities. Basics of design of standards intersections. Classification of road pavements. Evolution aggregate bases. Asphat pavements. Classification of road pavements. Evolution aggregate bases. Asphat pavements. Scope of lectures and designing from the subject "Roads and Motorways I" Stubject passing criteria Passing threshold Percentage of the final grade and criteria Scope of lectures and variations. 60.0% 30.0% 40.0% Project I 60.0% 30.0% 20.0% 20.0% Project I 60.0% 30.0% 20.0% 20.0%		objects and details, processes and engineering systems by applying appropriate standards and	pavement structure to particular subgrade conditions and road traffic. He knows the basic rules of raod pavements construction and	present the results of task [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				
knowledge and understanding of the processes, established standards and design methods in the civil engineering subject area and of their limitations. distinguish the characteristics of the basic technological processes in relation to requirements of pavement structure layers and selection of solutions. The student knows the principles of simple road intersection designing. The student is able to assess the conditions of road pavements. Basics of design of pavement structure. Calcasification of road pavements. Basics of design of pavement structure. Calcagoue of typical pavement structures. Formation layer and capping layer. Road materials (bitumens, aggregates, asphalt mixes). Base layers stabilized with hydraulic binders. Unbound aggregate bases. Asphalt pavements. Prerequisites and co-requisites Scope of lectures and designing from the subject "Roads and Motorways I" Assessment methods and criteria Subject passing criteria Passing threshold Percentage of the final grade foods. Recommended reading Basic literature 60.0% 30.0% Project I 60.0% 30.0% Pass of lectures sem V and VI 60.0% 40.0% Recommended reading Basic literature 1. Wizorce I Standardy projektowania WRD, Ministerstwo infrastruktury. Paineirschnie asfaltowe, WKL, 2004 Supplementary literature 1. Bizajowski K., Styk S., Technologia warstw asfaltowych, WKL, 2004. 1. Bizajowski K., Styk S., Technologia warstw asfaltowych, WKL, 2004. Supplementary literature 1. Bizajowski K., Styk S., Techn		engineering structures in a sustainable manner, with care for the natural environment and a	construction in a sustainable way, with care for the natural environment and a minimal carbon	present the results of task [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				
design of pavement structure. Catalogue of typical pavement structures. Formation layer and capping layer. Road materials (bitumens, aggregates, asphalt mixes). Base layers stabilized with hydraulic binders. Unbound aggregate bases. Asphalt mixes). Base layers stabilized with hydraulic binders. Prerequisites and co-requisites Scope of lectures and designing from the subject "Roads and Motorways I" Assessment methods and criteria Subject passing criteria Passing threshold Percentage of the final grade Project I 60.0% 30.0% Pass of lectures sem V and VI 60.0% 30.0% Recommended reading Basic literature 1. Wizore i Standardy projektowania WRD, Ministerstwo Infrastruktury. 2. Pitat J., Radziszewski P., Nawierzchnie asfaltowe, WKŁ, 2004 3. Szydlo A., Nawierzchnie drogowe z betonu cementowego, Polski Cement, 2004 4. Katalog typowych konstrukcji nawierzchni podatnych i połsztywnych., GDDKiA, Warszawa, 2014 Supplementary literature 1. Blażejowski K., Styk S., Technologia warstw asfaltowych, WKŁ, 2009. 2. 2. Judycki J i wsp:: Analizy i projektowanie konstrukcji nawierzchni podatnych i półsztywnych. WKŁ 2014 Blażejowski K., Styk S., Technologia warstw asfaltowych, WKŁ, 2009. 2. 2. Judycki J i wsp:: Analizy i projektowanie konstrukcji nawierzchni podatnych i półsztywnych. WKŁ 2014 e-Nauczaniu distance learning course <td></td> <td>knowledge and understanding of the processes, established standards and design methods in the civil engineering subject area</td> <td>distinguish the characteristics of the basic technological processes in relation to requirements of pavement structure layers and selection of solutions. The student knows the principles of simple road intersection designing. The student is able to assess the conditions of road pavement</td> <td colspan="2">knowledge [SW3] Assessment of knowledge contained in written work and</td>		knowledge and understanding of the processes, established standards and design methods in the civil engineering subject area	distinguish the characteristics of the basic technological processes in relation to requirements of pavement structure layers and selection of solutions. The student knows the principles of simple road intersection designing. The student is able to assess the conditions of road pavement	knowledge [SW3] Assessment of knowledge contained in written work and				
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example questions/ tasks being completed		eResources addresses Adresy na platformie eNauczanie:						
Work placement Not applicable	Example issues/ example questions/ tasks being completed	e-Nauczaniu distance learning course						
	Work placement	Not applicable						

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