GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Designing streets and intersections, PG_00044205		
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	Optional subject group 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	6	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	mgr inż. Tomasz Mackun	
	Teachers	mgr inż. Tomasz Mackun mgr inż. Artur Ryś	

Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	15.0	0.0	15.0	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=12865						

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	15.0	50

Subject objectives	Acquiring knowledge in the design of selected elements of road infrastructure

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K6_W10] Has basic knowledge on design, construction and maintenence of roads and railroads	The student learns the rules constructing elements road infrastructure The student knows how to design selected infrastructure elements road The student is able to take into account the impact of designed elements on environment	[SW2] Assessment of knowledge contained in presentation [SW3] Assessment of knowledge contained in written work and projects
[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	The student has the ability to design urban infrastructure in the form of an intersection, infrastructure for pedestrians and cyclists, parking bays and bus stops.	[SU2] Assessment of ability to analyse information [SU3] Assessment of ability to use knowledge gained from the subject [SU4] Assessment of ability to use methods and tools [SU5] Assessment of ability to present the results of task
[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	The student is knowledgeable about design of intersections road, sewage and non-sewage systems and roundabouts, no road design theme for bicycles, sidewalks, parking lots and bus stops	[SW2] Assessment of knowledge contained in presentation [SW3] Assessment of knowledge contained in written work and projects
[K6_W15] Has knowlege of construction law and environmetal impact of investment realisation	The student has knowledge of the provisions of road infrastructure design and road traffic law.	[SW2] Assessment of knowledge contained in presentation [SW3] Assessment of knowledge contained in written work and projects

Subject contents

1. General information on the design of intersections 2. General information on the design of road junctions 3. Detailed rules of designing roundabout intersections 4. Detailed principles of designing selected elements of road junctions 5. Designing elements of road infrastructure in cities - bus stops, parking lots, roads bicycle, sidewalks

Prerequisites and co-requisites

The knowledge obtained at the stage of the sem. 5 as part of Roads and Highways Construction

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Attendance	80.0%	30.0%
Implementation of the project	70.0%	70.0%

Recommended reading

Basic literature	Warunki techniczne jakim powinny odpowiadać drogi publiczne, 1999
Supplementary literature	Praca zbiorowa, red. R. Krystek Węzły drogowe i autostradowe, WKiŁ 2008 Wytyczne projektowania skrzyżowań, GDDP, 2008
eResources addresses	Adresy na platformie eNauczanie:

Example issues/ example questions/ tasks being completed

1. Design a roundabout intersection

2. Design elements of road infrastructure in the city - sidewalks, bicycle routes, stops buses, parking lots

Work placement

Not applicable