GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Design of Track Layouts, PG_00044237		
Field of study	Civil Engineering		
Date of commencement of studies	October 2020	Academic year of realisation of subject	2023/2024
Education level	first-cycle studies	Subject group	Optional subject group
Mode of study	Full-time studies	Mode of delivery	at the university
Year of study	4	Language of instruction	Polish
Semester of study	7	ECTS credits	3.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Department of Railway Engineering -> Faculty of Civil and Environmental Engineering		
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Kamila Szwaczkiewicz	
	Teachers	dr inż. Kamila Szwaczkiewicz mgr inż. Piotr Omieczyński	

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	40.0	75

Subject objectives

The aim of subject is obtainment of knowledge and abilities concerning rail surface construction and design of small stations geometric systems.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K6_U17] has specialized skills in civil engineering within offered specialization	The student can prepare the project data and design basic turnout route, calculate number of tracks for small railway stations, calculate overall length of station tracks, design station track layout, design the access to the platforms along with the platforms	
[K6_W16] Has deeper and adequate knowlege of civil engineering, within offered specialization	The student interprets the geometric and physical parameters describing the geometric systems. The student knows the principles of track layouts designing.	

Subject contents

Railway turnouts design and geometry. Track connections. Track connections shaping and sizing. Railway track junctions design. Railway stations classification. Passenger stations. Goods stations. Marshalling yards. Parking stations. Calculation elements of passenger stations, goods stations and marshalling yards.

Prerequisites and co-requisites

Railroads

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Test	60.0%	51.0%
Project	100.0%	49.0%

Recommended reading	Basic literature	1. Massel A.: Projektowanie linii i stacji kolejowych. PKP Polskie Linie Kolejowe, Warszawa 2010. 2. Skibiński K.: Budowa kolei żelaznych : połączenia torów. Cz. 1. Obrachowanie połączeń torów. Nakładem komisji wydawniczej biblioteki politechnicznej. Lwów 1897. 3. Chełmecki W.: Stacje kolejowe cz. I. Politechnika Krakowska, Kraków 1997. 4. Chełmecki W.: Stacje kolejowe cz. II. Politechnika Krakowska, Kraków 2001.
	Supplementary literature	1. Cieślakowski S.J.: Stacje kolejowe. WKŁ, Warszawa 1992. 2. Węgierski J.: Układy torowe stacji. WKŁ, Warszawa 1974.
	eResources addresses	Adresy na platformie eNauczanie:
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	