GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Management and organization of railway traffic, PG_00044650		
Field of study	Transport		
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 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	4	Language of instruction	Polish
Semester of study	7	ECTS credits	4.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Faculty of Civil and Environmental Engineering		
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Sławomir Grulkowski	
	Teachers	dr inż. Sławomir Grulkowski	

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	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 didactic classes included in study plan	Participation in consultation hours	Self-study	SUM
Number of study hours	45	10.0	45.0	100

Subject objectives

Obtaining basic information on the technique and organization of railway traffic.

Transmission of the message on vertical management in rail traffic

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K6_U12] able to select tools and methods, carry out assessments and simple tests of transport systems to an extent required of the specialty / learning profile	The student is able to design and evaluate the effectiveness of the timetable. Can assess bandwidth parameters and find solutions to problems	[SU2] Assessment of ability to analyse information [SU4] Assessment of ability to use methods and tools
[K6_W17] has proficiency in transport systems as appropriate for their specialty	The student is able to interpret movement problems and find a solution.	[SW1] Assessment of factual knowledge

<table>
<tr><td>Subject contents</td><td>LECTURE

Rules and procedures for running train traffic on the railway network.

Timetable preparation procedure

Technology of passenger transport

Technology of rail freight Interoperability

Capacity of lines and railway stations.

PROJECTS

Cyclical timetable

Circulation and rotation of the composition

Calculation of bandwidth</td></tr>
<tr><td>Prerequisites and co-requisites</td><td>Basic information on the subjects Railway Traffic Engineering and Rail Transport Infrastructure</td></tr>
<tr><td>Assessment methods and criteria</td><td><table><tr><th>Subject passing criteria</th><th>Passing threshold</th><th>Percentage of the final grade</th></tr><tr><td>Projects</td><td>60.0%</td><td>50.0%</td></tr><tr><td>Test</td><td>60.0%</td><td>50.0%</td></tr></table></td></tr>
<tr><td>Recommended reading</td><td><table><tr><td>Basic literature</td><td>Jacyna M., Gołębiowski P., Krześniak M., Szkopiński J., Organizacja ruchu kolejowego, Warszawa, 2019.

Żurkowski A., Pawlik M., Ruch i przewozy kolejowe. Sterowanie ruchem, Warszawa, 2010.

Żurkowski A., Ewolucja i nowoczesne zasady budowy wykresu ruchu pociągów pasażerskich, Logistyka, 3, 2014.

Nowosielski L., Organizacja przewozów kolejowych, KOW, Warszawa, 1999</td></tr><tr><td>Supplementary literature</td><td>Urbanyi-Popiołek I., Ekonomiczne i organizacyjne aspekty transportu, Wyższa Szkoła Gospodarki w Bydgoszczy, Bydgoszcz, 2013

Zalewski P., Siedlecki P., Drewnowski A., Technologia transportu kolejowego, WKŁ, Waeszawa, 2004.</td></tr><tr><td>eResources addresses</td><td>Adresy na platformie eNauczanie:
Zarządzanie i Organizacja Ruchu Kolejowego - 7T_I_IR_2023/24 - Moodle ID: 30685
https://enauczanie.pg.edu.pl/moodle/course/view.php?id=30685</td></tr></table></td></tr>
<tr><td>Example issues/ example questions/ tasks being completed</td><td>What is train and shunting?

Cyclical, integrated timetable

Calculation of transport needs</td></tr>
<tr><td>Work placement</td><td>Not applicable</td></tr>
</table>