GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	TRACK MAINTENANCE TECHNOLOGY, PG_00044236		
Field of study	Civil Engineering		
Date of commencement of studies	October 2021	Academic year of realisation of subject	2024/2025
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	2.0
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		
	Teachers		

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	15.0	15.0	0.0	0.0	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	15.0	50

Subject objectives

To acquaint students with technologies repair the tracks and subgrade. The choice of appropriate technology repair, machinery and equipment.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K6_K01] is aware of necessity of professional and personal competences improvement; complements and broadens his knowlege about modern processes and technologies	Is aware of the development of track repair technology. Independently expands knowledge in the field of mechanization of track works.	
[K6_W16] Has deeper and adequate knowlege of civil engineering, within offered specialization	Describes the technology of repairs of the track surface and railway track bed. Recognizes and describes machines used in track repairs.	
[K6_U17] has specialized skills in civil engineering within offered specialization	He can select the appropriate technology and machines for the indicated damage. He can plan the repair of the railway surface.	

Subject contents

Maintenance and repair of railway tracks. Mechanization railway works. Grinding rails. Tamping the track. Cleaning of ballast. Welding of rails. Modern machinery for construction and maintenance of railways.

Prerequisites and co-requisites

Railways

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Midterm colloquium	50.0%	50.0%
Project task	100.0%	50.0%

Recommended reading

Basic literature	Kędra Z.: Technology of rail track work. Wydawnictwo Politechniki Gdańskiej, Gdańsk 2015.
Supplementary literature	Publications relating to railway machines.
eResources addresses	Adresy na platformie eNauczanie:

Example issues/ example questions/ tasks being completed

Work placement

Not applicable