



Subject card

Subject name and code	TRACK MAINTENANCE TECHNOLOGY, PG_00044236						
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			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	dr inż. Zbigniew Kędra					
	Teachers	dr inż. Zbigniew Kędra					
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_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.				
	[K6_W16] Has deeper and adequate knowledge 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_K01] is aware of necessity of professional and personal competences improvement; complements and broadens his knowledge 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.				
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		
	Project task		100.0%		50.0%		
	Midterm colloquium		50.0%		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						