Subject card

Subject name and code	Technology of Track Works , PG_00041394
Field of study	Civil Engineering

Date of commencement of studies	February 2025	Academic year of realisation of subject	2025/2026
Education level	second-cycle studies	Subject group	Optional subject group
Mode of study	Full-time studies	Mode of delivery	at the university
Year of study	2	Language of instruction	Polish
Semester of study	3	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. Zbigniew Kędra Teachers —

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	0.0	0.0	0.0	0.0	30.0	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	Expanding knowledge of technology trackwork. Discussion of modern machines for of rail track work.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K7_U15] has advanced skills in civil engineering within offered specialization/profile	Is able to plan the implementation of railway works and prepare documentation for the construction and repair of railways	[SU1] Assessment of task fulfilment
[K7_W15] has deep and adequate knowlege of civil engineering, within offered specialization and profile	Has structured knowledge in the field of organization and planning of railway works	[SW2] Assessment of knowledge contained in presentation
[K7_K01] is aware of necessity of professional competences improvement; obeys the professional ethics code	Understands the need to constantly improve professional qualifications and supplement knowledge in the field of technology and organization of railway works	[SK3] Assessment of ability to organize work [SK5] Assessment of ability to solve problems that arise in practice
[K7_K04] understands the necessity of dissemination civil engineering knowlege in the society and to suport the proffesional ethos of a civil engineer	He understands the need to provide the public with knowledge in the field of railway road construction	[SK4] Assessment of communication skills, including language correctness
[K7_W08] has deep knowledge of railway track construction, including high speed railroads; design and renovation of railroads of complex geometry; has detailed knowledge about diagnistics of railroads, knows basics of railway traffic organisation and control	Has structured knowledge in the field of construction, repair and modernization of railways	[SW2] Assessment of knowledge contained in presentation

Subject contents	Maintenance and repair of railway tracks. Mechanization railway works. Grinding rails. Tamping the track. Cleaning of ballast. Welding of rails. Continuous repair of railway track and subgrade. Modern machinery for construction and maintenance of railways. Planning railway works.
Prerequisites and co-requisites	

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Presentation	60.0%	100.0%

Recommended reading	Basic literature	Kędra Z.: Technologia robót torowych. Wydawnictwo Politechniki Gdańskiej, Gdańsk, 2015
	Supplementary literature	Publications in journals and conferences.
	eResources addresses	Adresy na platformie eNauczanie:
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	

Document generated electronically. Does not require a seal or signature.