Title	Code
Technology of railway materials and track structure	**1010101161010120308**
Field: **Civil Engineering First-cycle Studies**	Year / Semester: **3 / 6**
Specialty: **Road and Railroad Engineering**	Course: **core**
Hours: Lectures: **2** Classes: **-** Laboratory: **-** Projects / seminars: **2**	Number of credits: **3**
	Language: **polish**

Lecturer:

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Status of the course in the study program:

-Specialist course for students of Road and Railroad Engineering.

Assumptions and objectives of the course:

-Learning about railway track structure elements, their parameters and admissible parameter deviations. Basics of railway track diagnosis. Ability to assemble a railway track and measure its parameters.

Contents of the course (course description):

-Rails: properties, kinds and types, receiving investigations, admissible deviations. Sleepers: materials, investigations, defects and virtues of wood and concrete sleepers. Railway ballast. Classical and CWR track.

Laboratory: knowledge and implementation of rail joints. Diagnostic measurements of rail track

Project: Properties of rails, sleepers and ballast, CWR track.

Laboratory: assembly of railway track structure. Measurements of railway track structure materials.

Introductory courses and the required pre-knowledge:

-Knowledge from courses: Transport infrastructure; basic knowledge of strength of material and soil mechanics.

Courses form and teaching methods:

-Lectures illustrated with transparencies or multimedia equipment, laboratory courses, design courses.

Form and terms of complete the course - requirements and assessment methods:

-Written test, participation in laboratory courses, realisation and defence of a project.

Basic Bibliography:

Additional Bibliography: