

Title Diagnostics of the road pavements	Code 1010102121010120288
Field Civil Engineering Second-cycle Studies	Year / Semester 1 / 2
Specialty Roads and Airfields	Course core
Hours Lectures: 1 Classes: - Laboratory: - Projects / seminars: 1	Number of credits 3
	Language polish

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Status of the course in the study program:

-The core (special and obligatory) course for students of Civil Engineering Second-cycle Studies, faculty of Civil and Environmental Engineering, speciality: Roads and Airfields.

Assumptions and objectives of the course:

-Objective of the course is to get students acquainted with problems connected with safety of pavement use, especially to define a current technical condition (state) of the pavements, causes of its existence and future time period of change of technical condition of the pavements.

Contents of the course (course description):

-Types and objective of the diagnostics of pavement. The factors having a influence on condition of road pavements: the traffic action, the atmospheric and technological factors.
Genesis of road pavement faults. Diagnostics of the technical condition of pavements. Forecasting of the technical condition of pavements. Measurements of the longitudinal and cross evenness, the friction factors, the condition of pavements surface and the load capacity of pavements.
Methods of assessment of the condition of pavement. Systems of assessment of the condition of pavement SOSN and SOSN-B. System of assessment of the condition of road shoulders and drainages SOPO. Diagnosis of pavement as a basis of choice (option) of maintenance works.

Introductory courses and the required pre-knowledge:

-Basic knowledge lectured for first-cykle studies with the scope of roads and streets, technology of road works, motorway, maintenance and operating of roads.

Courses form and teaching methods:

-Lectures (including the audio-visual aids). Exercises-display of measurement devices and site exercises concerning visual stock-taking of pavement. Elaboration of results of measurements for particulars of types of measurement devices.

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

-Lecture: written examination (attestation). Assessment of exercise concerning measurement devices.

Basic Bibliography:

Additional Bibliography: