

Title <b>Motorway</b>	Code <b>1010101151010120254</b>
Field <b>Civil Engineering First-cycle Studies</b>	Year / Semester <b>3 / 5</b>
Specialty <b>Road and Motorway Engineering</b>	Course <b>core</b>
Hours Lectures: <b>2</b> Classes: -    Laboratory: -    Projects / seminars: <b>1</b>	Number of credits <b>5</b>
Language <b>polish</b>	

**Lecturer:**

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**Status of the course in the study program:**

-The core (special and obligatory) course for students of Civil Engineering First-cycle Studies, faculty of Civil and Environmental Engineering, speciality: Road and Motorway Engineering.

**Assumptions and objectives of the course:**

-Objective of the course is to get students acquainted with the technical and building regulations concerning the design and build of motorways. The basis juristic acts concerning the toll-motorways and environment protection will be presented. Students will acquire knowledge within the scope of design of a motorway section in site plan, longitudinal and cross section including technical installations, passenger service areas or toll collection places.

**Contents of the course (course description):**

-The motorways in Europe. Directional configuration of the motorways and expressways in Poland. The technical and building regulations concerning the toll-motorways. The technical parameters for design in site plan, longitudinal and cross section. Coordination of geometric road elements. Forming of the road ramp. Components of the total land requirement for motorways. The devices connected with protection of motorway as well as organization and safety of traffic. The technical equipment of motorways. The draining and water run-off equipments. The passenger service areas. The toll collection places. Conditions of safe use of motorway. Assessment of technical state (condition) of motorway pavements. Load capacity and stability of the earthen and pavement structures for motorways. Basic legal acts concerning the toll-motorways and the Domestic Road Found. The act about the detailed principles of preparation and realization of the highways investments. Detailed requirements of the auction procedure in regard to granting a concession for building and operating of the toll-motorways valid until 2004. Concessions for building and operating of the toll-motorways until 2005. Contract of building and operating of motorways from 2005. The act about concession for building works. Detailed principles of charging a fare for the toll-motorways. The law of an environment protection. Nature 2000. Assessments of action of motorway on an environment. Green bridges.

**Introductory courses and the required pre-knowledge:**

-Basic knowledge of the Roads and streets and the Road materials and pavements technology.

**Courses form and teaching methods:**

-Lectures illustrated by audiovisual method. Technical excursions.

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

-Written examination. Attestation of design exercises.

**Basic Bibliography:**

**Additional Bibliography:**