

## ROADS AND STRUCTURES

(course title)

### COURSE SYLLABUS ABSTRACT of higher education institution speciality

1-37 01 06 "Technical operation of vehicles"

(speciality code and name)

	STUDY MODE		
	full-time	part-time	part-time (shortened program)
Year	3	5	2
Semester	5	7	3
Lectures, hours	16	4	4
Practical classes (seminars), hours	18	4	4
Exam, semester	5	7	3
Contact hours	34	8	8
Independent study, hours	26	52	52
Total course duration in hours / credit units	60/1,5		

#### 1. Course outline

The academic discipline includes the acquisition by students of knowledge on the construction and operation of roads and structures, as well as the features of their construction, maintenance and repair.

#### 2. Course learning outcomes

Upon completion of the course, students will be expected to know:

- device, design procedure and rules for the operation of highways;
- the influence of the parameters of roads and artificial structures on them on the efficiency of road transport and the safety of vehicles.

be able to:

- to determine the categories and characteristics of roads;
- work with technical regulations in the field of design, construction, repair and maintenance of roads and engineering structures;
- understand and draw up diagrams of longitudinal and transverse profiles of roads, use them correctly.

possess:

- methodological foundations of design and survey work on roads and engineering structures.

#### 3. Competencies

AC - 1 Be able to apply basic scientific and theoretical knowledge for theoretical and practical tasks of the technical operation of vehicles. AC - 2 Be proficient in systemic and comparative analysis. AC - 3 Possess research skills. AC - 4 Be able to work independently. AC - 5 Be able to create new ideas (be creative). AC - 6 Own an interdisciplinary approach to solving problems. AC - 7 Have skills related to the use of technical devices, computer management. AC - 8 Possess oral and written communication skills. AC - 9 Be able to learn, improve their skills throughout their lives. SPC - 2 Be capable of social interaction. SPC - 5 Be capable of criticism and self-criticism. SPC - 6 Be able to work in a team. SPC - 7 Possess stable moral and psychological qualities. PC - 4 Analyze and evaluate the collected data. PC - 7 Use global information resources. PC - 23 Develop technological documentation, take part in the development of the layout and standards. PC - 43 To generalize and use the best industry and cross-industry experience. PC - 46 Determine the goals of innovation and their achievements. PC - 47 Work with scientific, technical and patent literature.

#### 4. Requirements and forms of midcourse evaluation and summative assessment

oral-written form: reports on individual assignments with their oral defense, test.