AUTOMATIC CONTROL SYSTEMS FOR ROAD TRANSPORT
(course title)

COURSE SYLLABUS ABSTRACT
of higher education institution speciality

1-37 01 06 «Technical operation of vehicles (by directions)»
(speciality code and name)

	STUDY MODE		
	full-time	part-time	part-time (shortened program)
Year	3	5	4
Semester	6	9	7
Lectures, hours	34	6	6
Practical classes (seminars), hours	16	4	4
Laboratory classes, hours	16	6	6
Pass/fail, semester	6	9	7
Contact hours	66	16	16
Independent study, hours	54	104	104
Total course duration in hours / credit units	120/3		

1. Course outline
Mastering by students of methods and means of existing systems of automatic regulation and control in road transport, the design of elements and systems used in road transport enterprises, as well as on cars, methods and means of calculating automatic control systems.
2. Course learning outcomes
Upon completion of the course, students will be expected to
know:
- elements of automation;
- systems of automatic regulation and control;
- means of automation, microprocessor systems for diagnosing in road transport;
- tendencies and directions of development of automation.
be able to:
-use automation devices in road transport for the purposes of maintenance, repair, design more advanced automatic control systems, produce methods for their calculation, diagnose machine units and reduce emissions of harmful substances into the atmosphere.
possess:
- methods and means of calculation of automatic control systems.
3. Competencies
AC - 1 Be able to apply basic scientific and theoretical knowledge to solve theoretical and practical problems 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 generate new ideas (be creative). AC - 6 Own an interdisciplinary approach to solving problems. AC - 7 Have skills related to the use of technical devices, information management and computer work. AC - 8 Possess oral and written communication skills. AC - 9 Be able to learn, improve their skills throughout their lives. SPC - 5 Be capable of criticism and self-criticism. SPC - 6 Be able to work in a team. PC - 32 Identify and analyze the causes of failures and malfunctions of units, assemblies, parts of maintenance equipment, diagnostics and repair of vehicles. PC - 33 Ensure the serviceable, operable condition of technological equipment. PC - 34 In accordance with the rules and regulations, periodically inspect lifting and inspection, diagnostic and other equipment in a timely manner, carry out its maintenance and repair. PC - 35 Ensure timely repair of process equipment, check its condition after repair, maintain the necessary technological documentation for repairs. PC - 36 Prepare technological equipment for certification.
4. Requirements and forms of midcourse evaluation and summative assessment.
To diagnose competencies, an oral-written form is used.
To assess the level of knowledge of students, the following diagnostic tools are used:
- offset;
- reports on practical exercises with their oral defense;
- reports on laboratory work with their oral defense.