

# METHODS OF TESTING AND CONFORMITY ASSESSMENT OF VEHICLES

## **COURSE SYLLABUS ABSTRACT**

**Speciality 1-37 80 01 «Vehicles»**

**Profiling Wheeled Vehicle Design**

	STUDY MODE	
	full-time	part-time
Year	1	1
Semester	2	2
Lectures, hours	48	12
Practical classes (seminars), hours	16	4
Exam, semester	2	2
Contact hours	64	16
Independent study, hours	56	104
Total course duration in hours / credit units	120/3	

### 1. Course outline

Study of the system approach and its capabilities in solving the problems of road transport, methods of modeling modern technological processes arising during testing and conformity assessment of vehicles, improvement of methods for analyzing test results and criteria for assessing the conformity of vehicles.

### 2. Course learning outcomes

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

research methods used at the theoretical and experimental levels; experiment planning issues; statistical processing of experimental data; research, analysis and synthesis of maintenance and repair systems based on the theory of queuing and simulation modeling; methods for assessing the conformity of vehicles; methods for determining the parameters of conformity of vehicles; methods of decision-making and decision-making.

be able to:

analyze the behavior of vehicle systems; draw up algorithms for the functioning of vehicle systems; develop a procedure for testing and conformity assessment of vehicles; synthesize and optimize vehicle test models; draw up scientific and technical reports on the results of the tests.

possess:

methods of processing and analyzing the results of experiments and tests; methods of regression and correlation analysis; methods of modeling the processes of vehicle systems.

### 3. Competencies

SK-5 Own methods of testing and conformity assessment of wheeled vehicles and their components

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

oral-written form: reports on practical works with their oral defense, exam.