THEORY OF AUTOMATED SYSTEMS IN AUTOMOBILES
(course title)

COURSE SYLLABUS ABSTRACT

6-05-0715-03 Cars, tractors, mobile and technological complexes
(speciality code and name)

Computer engineering in the automotive industry
(concentration)

	STUDY MODE
	full-time
Year	**3**
Semester	6
Lectures, hours	16
Practical classes (seminars), hours	34
Laboratory classes, hours	16
Exam, semester	6
Contact hours	66
Independent study, hours	42
Total course duration in hours / credit units	108/3

1. Course outline

The aim of the academic discipline is to master the general principles and basic methods of constructing and researching automatic control systems and their use in the design of real systems.

2. Course learning outcomes

Upon completion of the course, students will be expected to

know:

- prospects for the development of automobile automatic systems;
- principles of constructing automatic systems;
- methods of mathematical description of automatic systems;
- methods of finding static, dynamic and frequency characteristics of automatic systems;
- design, operation and calculation methods of various automatic systems of a car;

be able to:

- draw up functional and structural diagrams of automatic systems;
- perform static and dynamic calculations of automatic systems;
- calculate the stability of automatic systems;
- determine the quality indicators of automatic systems;
- analyze and evaluate the operation of automatic vehicle systems.

to possess a skill:

- perform static and dynamic calculations of automatic systems;
- analyze the stability of automatic systems;
- determine the quality indicators of automatic systems.

3. Competencies. Apply knowledge about the structure and operating principles of automatic vehicle systems

4. Requirements and forms of midcourse evaluation and summative assessment

Tests are carried out in the form of electronic tests on the Moodle platform. The exam is carried out in the form of an electronic test on the Moodle platform.