

TRACTION AND TRANSPORT VEHICLES

ANNOTATION TO THE CURRICULUM OF A HIGHER EDUCATION INSTITUTION

Specialty: 6-05-0715-03 «Cars, tractors, mobile and technological complexes»

Profiling: 1) Computer engineering in hoisting and transport engineering; 2) Computer engineering in construction and road engineering

	STUDY MODE
	full-time
Year	1, 2
Semester	2, 3
Lectures, hours	34
Laboratory classes, hours	34
Coursework, semester	3
Exam, semester	2
Contact hours	68
Independent study, hours	76
Total course duration in hours / credit units	144/4

1. Course outline

The purpose of the academic discipline is the formation of specialists who can reasonably and effectively apply existing and master new knowledge on the design and theory of self-propelled machines used in the construction, road and hoisting and transport works.

2. Course learning outcomes

Upon completion of the course, students will be expected to

know:

- history, classification, purpose, principles of operation and requirements for autotractor engines and chassis of self-propelled machines, their mechanisms and systems;
- fundamentals of the theory of the engine and self-propelled machine;
- trends in the development of autotractor building;
- technical solutions that increase productivity, efficiency, ergonomics and environmental friendliness of a self-propelled machine;

be able to:

- analyze the processes occurring in the engine and chassis elements of a self-propelled machine;
- evaluate the characteristics and choose the engine, mechanisms and chassis systems for construction, road and hoisting and transport self-propelled equipment;
- calculate and build traction-dynamic and fuel-economic characteristics of a self-propelled machine and, on the basis of this, analyze its quality;

to possess a skill:

- methods of analysis of consumer properties of self-propelled vehicles;
- methods for assessing the quality of engines and chassis of self-propelled vehicles.

3. Competencies

- Apply knowledge of the principles of operation, designs, properties of autonomous transport equipment

4. Requirements and forms of midcourse evaluation and summative assessment

To diagnose competencies, oral-written and technical forms are used.

To assess the level of knowledge of students, the following diagnostic tools are used:

- reports on laboratory work;
- electronic tests;
- exam.