COURSE SYLLABUS ABSTRACT

Specialty: 1-36 11 01 - "Innovative equipment for the construction complex (by directions)"
Direction of the specialty: 1-36 11 01 - 01 "Innovative equipment for the construction complex (production and operation)"
Specialization: 1-36 11 01 - 01 01 "Innovative technology for the construction and operation of highways"

	STUDY MODE
	full-time
Year	**2**
Semester	3
Lectures, hours	34
Laboratory classes, hours	34
Exam, semester	3
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;

possess:
- 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
CK-6: Design, calculate and operate lifting, transporting, loading and unloading and utility vehicles used in construction in the mechanization of processes for the movement of goods

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.