CONSTRUCTION AND SPECIAL CRANES
(course title)
COURSE SYLLABUS ABSTRACT

Specialization 6-05-0715-03: Automobiles, Tractors, Mobile and Technological Complexes
Specialization: Computer Engineering in Material Handling Machinery

	STUDY MODE
	full-time
Year	4
Semester	7
Lectures, hours	16
Laboratory classes, hours	34
Course project, semester	7
Contact hours	50
Independent study, hours	58
Total course duration in hours / credit units	108/3

1. Course outline. To develop specialists who are able to reasonably and effectively apply existing skills and acquire new ones in the design and calculation of construction and special-purpose cranes, as well as their application areas, enabling them to make specific practical decisions regarding the design and use of construction and special-purpose cranes and their mechanisms.
2. Course learning outcomes

Upon completion of the course, students will be expected to

know: The main types of construction and special-purpose cranes and their areas of application; the main areas of further development and improvement of construction and special-purpose cranes; design versions, operating principles, and calculation features of the main parameters of construction and special-purpose cranes; the main types of automatic lifting devices, their design versions, and calculation features; ensuring the safety and reliability of construction and special-purpose cranes.

be able to: justify the selection of construction and special cranes for specific conditions of their use; use the methodology for calculating the main parameters of construction and special cranes, lifting devices.

to possess a skill: acquire knowledge and skills in the selection and calculation of the main parameters of construction and special cranes, lifting devices; information on the main directions of further development and improvement of construction and special cranes.

3. Competencies. Apply methodological principles for designing lifting and transport machines.
4. Requirements and forms of current and intermediate certification. The form of intermediate certification is an oral test. The current certification form is oral defense of laboratory work.