Elevators and Hoists

COURSE SYLLABUS ABSTRACT

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

Concentration: Computer engineering in lifting and transport engineering

	STUDY MODE
	full-time
Year	3
Semester	6
Lectures, hours	34
Laboratory classes, hours	34
Pass/fail, semester	6
Guided independent study, hours, type/ semestr	68
Independent work, hours	76
Total course duration in hours / credit units	144/4

1. Course outline

The aim of the academic discipline is to train specialists who are able to reasonably and effectively apply existing and master new technologies in the field of design and operation of elevators and lifts.

2. Course learning outcomes

Upon completion of the course, students will be expected to

- **know**: design and operation of elevators and lifts; basic requirements of the "Rules for the design and safe operation of elevators"; trends in the development and improvement of elevator and lift structures;
- **be able to**: perform calculations of ropes, winches, brakes and their elements; make calculation schemes and perform strength calculations of elevator cabins, machine parts and catchers; study elevator parameters on laboratory stands; use special literature, reference books, standards and technical guidance materials;
- to possess a skill: carrying out calculations of ropes, winches, brakes and their elements; drawing up calculation schemes and making strength calculations of elevator cabins, machine parts and catchers; studying elevator parameters on laboratory stands; using special literature, reference books, standards and technical guidance materials.

3. Competencies

Apply methodological foundations in the field of elevator and lift design.

4. Requirements and forms of midcourse evaluation and summative assessment

Oral, written and technical forms are used to diagnose competencies. To assess the level of knowledge of students, the following diagnostic tools are used: laboratory work protection, credit.