COMPUTER SIMULATION OF TECHNICAL OBJECTS AND PROCESSES

COURSE SYLLABUS ABSTRACT

Specialty 7-06-0715-01 Transport

Profiling "«Technical operation of vehicles»"

	STUDY MODE	
	full-time	part-time
Year	1	1
Semester	1	1
Lectures, hours	34	8
Laboratory classes, hours	34	8
Exam, semester	1	1
Contact hours	68	16
Independent study, hours	148	200
Total course duration in hours / credit units	216/6	

1. Course outline

The academic discipline is aimed at training highly qualified specialists with the skills to solve research problems through the use of modern computer technologies in the design of transport facilities and scientific research.

2. Course learning outcomes

Upon completion of the course, students will be expected to

– to know: modern computer-aided design systems used in the creation of transport facilities and systems; fundamentals of mathematical modeling of technical objects and processes; basics of simulation modeling of technical objects and processes;

– be able to: apply computer-aided design systems in the creation of transport facilities and systems; create mathematical models of technical objects and processes; develop simulation models of technical objects and processes;

– have the skill: solving research problems through the use of modern computer technologies in the design of transport facilities and conducting scientific research.

3. Competencies

UC-2 To solve research and innovation problems based on the use of information and communication technologies

UC-4 Provide communication, demonstrate leadership skills, be able to build teams and develop strategic goals and objectives

UC-5 Develop innovative receptivity and ability to innovate

UPC-1 Apply modern computer technologies in scientific research and design of transport facilities and systems

UPC-2 Apply computer-aided design systems in the creation of transport facilities and systems

4. Requirements and forms of midcourse evaluation and summative assessment

oral-written form: reports on laboratory work with their oral defense, exam.