COMPUTER MODELING
(course title)

COURSE SYLLABUS ABSTRACT

6-05-0715-03 Cars, tractors, mobile and technological complexes
(speciality code and name)

Computer engineering in construction and road engineering
(concentration)

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

1. Course outline

The purpose of the discipline is to form knowledge, skills and abilities among students studying in the specialty 6-05-0175-03 "Cars, tractors, mobile and technological complexes", allowing them to solve problems related to the mathematical modeling of systems and mechanisms of construction, road and lifting machines, to be able to correctly and reasonably, using mathematical modeling methods and computers to choose required parameters and characteristics.

2. Course learning outcomes

Upon completion of the course, students will be expected to

know:

- methods for modeling SDM structures;
- methods for modeling SDM processes;
- methods of solving economic problems;
- The basics of working with com-puter technology;

be able to:

- create mathematical models of SDM workflows
- perform calculations of the characteristics of machines and their systems using specialized and universal software.
- Use modern computer calculation methods.
- to prossess a skill;
- compilation of mathematical models of SDM workflows
- performing calculations of the characteristics of machines and their systems using specialized and universal software.
- using modern computer calculation methods.

3. Competencies

Apply methodological principles of designing machines for earthworks

4. Requirements and forms of midcourse evaluation and summative assessment.

The form of the current certification is intermediate performance monitoring, intermediate certification, survey.
The form of intermediate certification oral, written.