# COMPUTER DESIGN AND SIMULATION

## COURSE SYLLABUS ABSTRACT

**Specialty** 7-06-0732-01 Construction
**Concentration** Transport construction

| | STUDY MODE | |
|---|---|---|
| | full-time | part-time |
| Year | **2** | **2** |
| Semester | 3 | 3 |
| Lectures, hours | 8 | 2 |
| Laboratory classes, hours | 50 | 10 |
| Test, semester | 3 | 3 |
| Contact hours | 58 | 12 |
| Independent study, hours | 158 | 204 |
| Total course duration in hours / credit units | **216/6** | |

1. Course outline
The objective of the academic discipline is to provide students with the skills to solve practical problems using methods and methodologies of information modeling in specialized engineering software products.
2. Course learning outcomes
As a result of mastering the academic discipline, the student must
know:
- theory on information modeling;
- basic principles of modeling;
- software products for modeling.
be able to:
- build a simulation model to solve engineering problems;
- work in the AnyLogic simulation environment.
- build simulation models in the AnyLogic environment.
Have a skill:
- simulation modeling;
- simulation work in the AnyLogic system.
3. Competencies
- Solve research and innovation problems based on the use of information and communication technologies
- To use modern software systems for design, 3D-modeling, development of information models of industrial and civil facilities, to use the acquired knowledge to solve practical, research and innovation tasks.
4. Requirements and forms of midcourse evaluation and summative assessment
Current certification: – protection of laboratory work.
Intermediate certification: – test.