**INFORMATION TECHNOLOGIES AND AUTOMATION OF PRODUCTION PROCESSES IN THE ROAD INDUSTRY**

# COURSE SYLLABUS ABSTRACT

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

| | STUDY MODE | |
|---|---|---|
| | full-time | part-time |
| Year | 1 | 2 |
| Semester | 2 | 3 |
| Lectures, hours | 34 | 8 |
| Laboratory classes, hours | 50 | 10 |
| Exam, semester | 2 | 3 |
| Contact hours | 84 | 18 |
| Independent study, hours | 240 | 306 |
| Total course duration in hours / credit units | 324/9 | |

1. Course outline

The purpose of the discipline is to form specialists who are able to reasonably and effectively apply existing and master new knowledge, skills and abilities that allow them to make competent technical decisions in practical work during the exploration, design, construction, repair, operation and reconstruction of highways and transport structures using automation systems of technological processes and road construction machines with modern automation tools.

2. Course learning outcomes

Upon completion of the course, students will be expected to

know: - general patterns and trends in the development of automation of technological processes in construction; - automation systems of technological processes of road construction production; - automation and automation systems of road construction machines; - areas of application of automation systems and automation of production and technological processes.

be able to: - to choose the optimal automation systems for technological processes; - to make functional and structural diagrams of automation objects; - to model dynamic processes in research objects; - to analyze the stability and quality of management; - to be able to assess the level of automation of production; - to manage production processes using modern automation and computer technology.

to possess a skill: - assessment of the technical level of automation and automation equipment.

3. Competencies

UPK-3 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: – exam.