DESCRITIVE GEOMETRY, ENGINEERING AND COMPUTER GRAPHICS

(course title)

COURSE SYLLABUS ABSTRACT

Specialty <u>7-07-0732-01</u> Construction of buildings and structures **Profiling** <u>Car roads</u>

| | STUDY MODE |
|---|------------|
| | Full-time |
| Year | 1 |
| Semester | 1,2 |
| Lectures, hours | 34 |
| Practical classes, hours | 68 |
| Exam, semester | 1 |
| Pass/fail, semester | 2 |
| Contact hourse | 102 |
| Independent study, hours | 114 |
| Total course duration in hours / credit units | 216 / 6 |

1. Course outline: Introduction. Straight. Plane. Surfaces. Intersection of geometric shapes. Methods for transforming projections. Metric tasks. Projections with numerical marks.

2. Course learning outcomes.

Upon completion of the course, students will be expected to

- to know the methods of projection in the given systems of projection planes of a point, a straight line, a plane and a surface; signs of parallelism and perpendicularity of straight lines, a straight line and a plane, two planes; surfaces and how to set them on the drawing; basic principles for constructing the intersection of geometric shapes and their natural sizes; algorithm for constructing the boundaries of earthworks; GOST ESKD and SPDS; rules for the implementation of construction drawings; the basics of working in AutoCAD.

- be able to: be able to perform basic images; solve positional, metric and complex problems; perform construction drawings; read engineering drawings; use standards and reference books; use PC to make drawings.

- to possess a skill: presenting details, reading construction drawings; the use of computer technology to build drawings; rules for the preparation of construction documents.

3. Mastering this academic discipline should ensure the formation of the following competencies: To carry out graphic constructions on a plane and in space to solve professional problems.

4. Requirements and forms of current and intermediate certification:

Intermediate certification includes the defense of individual tasks, in which the student answers control questions. The current certification is carried out in the form of an exam (1st semester) and a test (2nd semester).