

DESCRIPTIVE GEOMETRY, ENGINEERING AND MACHINE GRAPHICS

(name of the discipline)

**ANNOTATION**

**TO THE CURRICULUM OF THE INSTITUTION OF HIGHER EDUCATION**

**Specialty 1 - 36 07 02 "Manufacture of products based on three-dimensional technologies"**

|  | STUDY MODE |
|--|------------|
|  | Full-time  |
| Course   | 1          |
| Semester   | 1, 2       |
| Lecture, hours   | 34         |
| Practical classes (seminars), hours  | 84         |
| In-class test, hours   | 2          |
| Test, hours  | 1          |
| Classroom hours for the academic discipline (including hours for managed independent work) | 118 (36)   |
| Independent work, hours  | 206        |
| Total course duration in hours / credit units  | 324 / 9    |

1. Brief content of the academic discipline: point; straight; metric properties of the projection; plane; drawing conversion methods; metric tasks; surfaces; positional tasks, KOMPAS-3D system.

2. As a result of studying the academic discipline, the student must know: the formation of drawings according to the projection method; graphic methods for solving positional and metric geometric problems; applied graphic programs and computer modeling; geometric shaping of machine-building parts; state standards for the execution and design of drawings.

Must be able to: build projection images of spatial geometric shapes on a plane; perform and read engineering drawings, while using standards and reference books; make drawings using computer graphics, build three-dimensional computer models of parts.

Must be proficient in: methods of developing and implementing graphic images for design estimates and other documentation, taking into account the requirements of GOST ESKD (in accordance with the BOD-2 curriculum and educational standard).

3. Mastering this academic discipline should ensure the formation of the following competencies:

| Codes of generated competencies | Names of competencies being formed  |
|---------------------------------|---|
| БПК-2                           | Be able to develop and execute graphic images for design estimates and other documentation, taking into account the requirements GOST ESKD. |

4. Requirements and forms of current and intermediate certification: traditional, multimedia, using a computer.