

# ENGINEERING GRAPHICS

## ANNOTATION TO THE CURRICULUM OF THE INSTITUTION OF HIGHER EDUCATION

### SPECIALTY 1 - 53 01 01 "AUTOMATION OF TECHNOLOGICAL PROCESSES AND PRODUCTION" (BY DIRECTION)

	Form of higher education
	Full-time (daytime)
Well	1
Semester	1, 2
Lectures, hours	34
Practical (seminar) classes, hours	84
Report, semester	2
Exam, semester	1
Classroom hours per academic discipline	118
Independent work, hours	138
Total hours per academic discipline / credit units	256/6

#### 1. Brief content of the discipline

Introduction. Projections of a point, a straight line, a plane. Types, sections, sections. Drawing conversion methods. Metric tasks. Surfaces. positional tasks. General information about KOMPAS-3D, SOLIDWORKS systems.

Classification of threads, threaded connections. Specification. Slotted and keyed connections. Sketching of parts such as "shaft", "gear wheel". Assembly drawing of the node. Detailing. Making working drawings of parts. Rules for applying dimensions and designations on engineering drawings.

#### 2. Learning outcomes

- **know** the methods of projection in a given system of projection planes of a point, a straight line, a plane and a surface; ways of solving positional and metric problems; geometric shaping of machine-building parts and GOST ESKD.

- **be able** to solve positional and metric problems, execute and read engineering drawings, use standards and reference books, make drawings using computer graphics.

- **own** the basics of descriptive geometry, methods of machine-building projection drawing, execution and reading of machine-building drawings, development and execution of design documentation.

#### 3. Formed competencies

Own the basics of descriptive geometry, methods of machine-building projection drawing, execution and reading of machine-building drawings, development and execution of design documentation.

#### 4. Requirements and forms of current and intermediate certification.

A module-rating system for assessing knowledge is used. Intermediate control of progress is carried out on the basis of the performance and protection of a number of graphic individual tasks with scoring. The current certification is carried out in the form of an exam (1st semester) and a differentiated test (2nd semester).