

**"TECHNOLOGY OF MACHINE AND INSTRUMENT ENGINEERING"
ANNOTATION
TO THE CURRICULUM OF A HIGHER EDUCATION INSTITUTION**

Specialty 1-40 05 01 Information systems and technologies (by directions)

	Form of higher education	
	Full-time (day)	Part-time abbreviated
Course	3	2
Term	5	4
Lectures, hours	34	2
Laboratory classes, hours	34	2
Exam, semester	5	4
Classroom hours for the academic discipline	68	4
Independent work, hours	82	146
Total hours of academic discipline / credits	150/4	

1. Summary of the academic discipline

The purpose of the discipline is to familiarize students with the basics and the most important scientific provisions of the technology of mechanical engineering and instrumentation, the formation of knowledge of technological processes and skills necessary for the design, manufacture of parts and assembly of products, technological control of design documentation.

2. Learning outcomes

As a result of mastering the discipline, the student must know:

- the structure of the production and technological process;
- the main ways to achieve the required accuracy and surface quality of products;
- types and methods of organizing the technology of assembly processes;

be able to:

- make up the technological process of processing parts and assembling products;
- choose the necessary technological equipment and tooling;
- calculate cutting modes and perform labor rationing;
- draw up technological documentation according to standards;
- monitor the progress of technological operations and the achievement of product quality;

- analyze the causes of marriage;

- analyze the economic efficiency of manufacturing products;

own:

- skills necessary for the design of new and modernization of existing technological processes for obtaining objects of machine and instrument engineering.

3. Formed competencies

Codes of formed competencies	The names of the competencies being formed
AK-1	Be able to apply basic scientific and theoretical knowledge to solve theoretical and practical problems.
AK-7	Have skills related to the use of technical devices, information management and computer work.
AK-11	Possess the basic methods, methods and means of obtaining, storing, processing information using computer technology.
PK-10	Develop technical and project documentation for the created software solutions for professional tasks.
PK-24	Use global information resources.
PK-32	Perform finite element modeling of the behavior of technical objects and the development of phenomena of various classes.

4. Requirements and forms of current and interim certification

The current and intermediate certification is carried out in written and oral-written form through the protection of laboratory work, control work, passing the exam.