STANDARDIZATION OF ACCURACY AND TECHNICAL MEASUREMENTS
(name of discipline)

ANNOTATION
TO THE CURRICULUM OF THE INSTITUTION OF HIGHER EDUCATION

Specialty 1-36 01 01-Technology of Mechanical Engineering, 1-53 01 01-Automation of Technological Processes and Productions, 1-36 01 03-Technological Equipment of Engineering Production

	STUDY MODE				
	full-time		full-time	full-time	
	1-36 01 01, 1-53 01 01	1-36 01 03	1-36 01 01	1-36 01 01	1-36 01 03
Year	3	3	3	2	3
Semester	5	5, 6	5	3	5
Lectures, hours	34	34	8	6	8
Laboratory classes, hours	16	16	4	-	4
Practical classes (seminars), hours	16	16	2	-	4
Course paper, semester	5	6	5	3	3
Exam, semester	5	5	5	3	3
Contact hours	66	66	14	6	16
Independent study, hours	42	42	94	102	92
Total course duration in hours / credit units	108/3	108/3	108/3	108/3	108/3

1 Course outline

The discipline "Standardization of accuracy and technical measurements" contains general concepts of methods of ensuring the interchangeability of the product at the stages of its life cycle, the basis for the selection of requirements for the accuracy of parameters, their control and the essence of standardization of these requirements.

2. Course learning outcomes

As a result of mastering the discipline, a student must

know:

- methods of ensuring interchangeability at the stages of the product life cycle;
- methods of rationing the accuracy of parameters;
- basic principles of building systems of tolerances and fits, basic standards - basic norms of interchangeability, covering systems of tolerances and fits for typical types of connections of machine parts and devices;
- theoretical foundations of measurement control of parameters;

be able to:

- use the standards of basic standards of interchangeability;
- mark accuracy requirements on drawings, read and decipher symbols;
- carry out measuring control of parameters with calibrators and basic universal measuring instruments;
- present the results of measurements with the indication of errors and uncertainties;

possess:

- methodology for ensuring the interchangeability of technical system components;
- methods of using accuracy rationing in the manufacture of parts and assemblies.
- methods of control of geometric parameters of parts.

3 Competencies

Mastering this training discipline should ensure the formation of the following competence: for the specialty 1-36 01 01: BPC-5.3 Know the basic principles of interchangeability, rationing and accuracy, standardization of tolerances and fits, possess the methods of rationing accuracy for different machine parts and production conditions. For 1-36 01 03: BPC-11. Be able to design machine parts and products in accordance with technical specifications, providing the necessary strength and durability of structures, using standard techniques and automation tools. For 1-53 01 01: SC-3.3 Know the basic principles of interchangeability, rationing and accuracy, standardization of tolerances and fits, have the methods of rationing accuracy for different machine parts and production conditions.

4 Requirements and forms of midcourse evaluation and summative assessment

Current and interim certification is conducted in written and oral-written form through tests, reports on laboratory works with their oral defense, control works, written exams.