

STANDARDIZATION OF ACCURACY AND TECHNICAL MEASUREMENTS

(name of discipline)

ANNOTATION TO THE CURRICULUM OF THE INSTITUTION OF HIGHER EDUCATION

Specialty 1-36 01 04 - Equipment and technologies for high-performance material processing

	STUDY MODE
	full-time
Year	3
Semester	5
Lectures, hours	34
Laboratory classes, hours	16
Practical classes (seminars), hours	16
Exam, semester	5
Contact hours	66
Independent study, hours	42
Total course duration in hours / credit units	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: BPC-12. Be able to use knowledge of metrology, standardization and certification methods to conduct experiments and evaluate experimental results

4 Requirements and forms of current and intermediate attestation

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.