### METROLOGY, STANDARDIZATION AND CERTIFICATION

(name of the discipline)

# ANNOTATION TO THE CURRICULUM OF THE INSTITUTION OF HIGHER EDUCATION

**Specialty** 1-54 01 02 - "Methods and devices for quality control and diagnostic state of objects"

**Specialization** 1-54 01 02 02 - "Non-destructive testing of materials and products"

	Form of higher education		
	Full-time (daytime)	Correspond ence	Corresponde nce abbreviated
Well	2		
Semester	3		
Lectures, hours	34		
Practical (seminar) lessons, watch	16		
Laboratory classes, hours	16		
Exam, semester	3		
Classroom hours per academic discipline	66		
Independent work, hours	42		
Total hours per academic discipline / credit units		108/3	

#### 1. Brief content of the discipline

The discipline contains material on theoretical, applied and legal metrology, standardization and conformity assessment, including issues of control and supervision of compliance with the requirements of regulatory and technical documentation, the state and use of measuring instruments.

#### 2. Learning outcomes.

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

**know:**basic concepts of metrology, standardization and conformity assessment; principles of operation of measuring instruments, their metrological and non-metrological characteristics; basic methods for measuring physical quantities; units of physical quantities and their standards; measurement tasks, selection of measurement methods, forms of presentation of measurement results; types of errors of measuring instruments and methods for their evaluation; issues of confirmation of conformity of products and personnel;

**be able to**: correctly choose methods and means of measurement; evaluate the results and errors of measurement results; apply standards in solving specific problems; possess: the ability to make a reasonable choice of technical and methodological support for measurements and tests, the skills to perform work on standardization and preparation for confirming the conformity of technical means, systems, processes, equipment and materials.

## 3. Formed competencies:

- SC-3 "To be able to choose the metrological support of technical means of control and regulatory documents for control."
- 4. Requirements and forms of current and intermediate certification. Requirements and forms of the current attestation: exam (oral and written form). For admission to the exam, the student in accordance with the curriculum is obliged to perform and defend laboratory and practical work, tests.