

## THEORY OF MEASUREMENT

(name of the discipline)

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

Specialty 1- 38 80 0 1 - " Instrument making "

Profiling 1-54 01 02 02 - " Technique and technology of non-destructive testing "

	Form of higher education	
	Full-time (daytime)	Correspondence
Well	1	1
Semester	1	1
Lectures, hours	eighteen	four
Practical (seminar) classes, hours	eighteen	four
Laboratory classes, hours	-	-
Classroom hours per academic discipline	36	8
Exam, semester	1	1
Independent work, hours	72	one hundred
Total hours per academic discipline / credit units	108/3	

#### 1. Brief content of the discipline

The discipline contains material on the fundamentals of measurement theory, measurement methods, influencing factors  $x$  in the preparation and performance of measurements, processing of experimental data and registration of measurement results, 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:** the main directions of the modern theory of measurements; to know the currently achieved characteristics of the accuracy of reproduction of quantities, the procedures for transferring units of physical quantities from standards to working measuring instruments (verification schemes).

**be able to:** build mathematical models of measurement objects; evaluate the errors of functions of approximate values of parameters; analyze the measurement conditions.

**own:** an idea of the principles of constructing equations for the processes of measurement of various physical quantities; skills in processing measurement results.

#### 3. Formed competencies:

- Code of Criminal Procedure - 2 " To be able to apply the theory of measurements in conditions of increasing complexity and the necessary accuracy of measuring instruments and tasks to be solved ."

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

Requirements and forms of the current attestation: exam (oral and written form). In order to be admitted to the exam, the student, in accordance with the curriculum, must complete and defend practical work, tests.