

**INSTRUMENTS AND MEASUREMENT METHODS UNDER CONDITIONS**  
**INNOVATIVE DEVELOPMENT OF SCIENCE,**  
**TECHNOLOGY AND TECHNOLOGY**  
(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
Test, 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 basics of the organization of science and metrology in the country, on international cooperation in the field of nanometrology, regulatory and methodological support and branches of the nanoindustry ,

2. Learning outcomes.

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

**know:** foundations of fundamental sciences on which the modern theory of measurements is based; main achievements and trends in the development of measuring technology and metrology; schemes of organization of scientific innovation activity; methods of organizing measurements in science and in production; directions for further development of the theory of measurements and ways to improve the quality of measurement information.

**be able to:** use knowledge of fundamental sciences in their practical work to solve specific research, information retrieval, methodological tasks; plan, organize and conduct scientific research; predict the results of their professional activities; organize measurements during scientific research and factory tests; select, justify and calibrate scales; perfect use of the measuring technique determined by the supervisor.

**own:** understanding of technical devices and instruments for measurements, their characteristics.

3. Formed competencies:

- Code of Criminal Procedure -3 " To be able to solve problems of optimal use and design of information-measuring systems based on the analysis and synthesis of mathematical models of specific measurement processes under known limitations in relation to system elements ."

4. Requirements and forms of current and intermediate certification.

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