

# CONTROL MEASURING EQUIPMENT

## ANNOTATION

### TO THE CURRICULUM OF THE EDUCATIONAL INSTITUTION

Specialty 6-05-0716-03 Information-measuring devices and systems

**Specialization: Information systems and technologies of nondestructive control and diagnostic**

	Form of receipt	
	Full-time (day)	Part-time abbreviated
Course	3	<b>3</b>
Semester	5	5
Lectures, hours	34	8
Practical (seminar) classes, hours	16	4
Laboratory classes, hours	16	4
Coursework, semester	5	6
Classroom hours in the academic discipline	66	16
Offset, semester	5	5
Independent work, hours	42	92
Total hours in the academic discipline/ credit units	108/3	

#### 1. Summary of the academic discipline.

Acquisition by students of knowledge on methods of converting measuring information into analog and digital form, on the design of analog, digital measuring instruments and primary measuring transducers of non-electrical quantities, skills of correct selection of measuring and control instruments, calculation of primary transducers of non-electrical quantities, assessment of errors of monitoring and measurement instruments

#### 2. As a result of mastering the educational discipline, the student must:

As a result of mastering the educational discipline, the student must know: the main characteristics of measuring instruments; methods and devices for measuring electrical values; arrangement of analog electrical measuring instruments and principles of their operation; arrangement of digital measuring instruments and principles of their operation; principle of operation and design of converters of non-electric quantities;

be able to: choose the correct measurement method; justify the selection of devices for measuring electrical and non-electrical values; measure electrical quantities; you take a primary transducer for measuring a non-electric quantity; calculate a primary converter of a non-electric quantity; correctly select calibration tools from measuring instruments and perform calibration.

#### 3. Competencies to be formed.

Mastering this discipline should ensure the formation of the following competencies: Be able to make a reasonable choice of a measuring transducer and a device for measuring a given physical quantity.

4. Requirements and forms of current and intermediate certification: control work, tests, protection of laboratory work, current certification and exam - intermediate certification (oral and written form).