

**INSTRUMENTS AND SYSTEMS FOR NON-DESTRUCTIVE TESTING
SUMMARY
TO THE CURRICULUM OF THE INSTITUTION OF HIGHER EDUCATION
Specialty 7-06-0716-03 Instrument Engineering
Profiling: Information systems and technologies of non-destructive testing and
diagnostics**

	Form of higher education		
	Face-to-face (day-to-face)	Absentee	Absentee concoction
Course	1	1	
Semester	1,2	1,2	
Lectures, hours	50	10	
Practical (seminar) classes, hours	32	8	
Laboratory classes, hours	34	6	
Classroom hours in the academic discipline	116	24	
Offset, Semester	1	1	
Exam, semester	2	2	
Independent work, hours	244	336	
Total hours in the academic discipline/ credit units	360/10		

1. Summary of Training Discipline

Mastering by masters of modern scientific knowledge in the field of development and creation of devices and systems of non-destructive testing and technical diagnostics of industrial facilities.

2. Training outcomes.

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

know: classification of means of non-destructive testing of substances, materials and products; structural diagrams and features of devices and systems of non-destructive control and diagnostics; types, diagrams and features of transducer-body structures; application of non-destructive testing of the natural environment, substances, materials and products;

be able to: analyze trends, perspectives and directions of development of devices and systems of non-destructive testing of substances, materials and products; identify optimal control conditions in order to develop and optimize non-destructive testing devices and systems; develop new tools and systems that ensure the greatest technical and economic effect during non-destructive testing of substances, materials and products;

have the skills to prepare, configure and work with technical devices, instruments and systems used in non-destructive testing of materials and industrial facilities.

3. Competencies to be formed.

The development of this educational discipline should ensure the formation of the following competencies: SK-1. Use modern devices, systems of non-destructive control and diagnostics of industrial products and facilities, choose effective technology of non-destructive testing for specific facilities

4. Requirements and forms of current and intermediate certification: abstract, individual tasks, test and exam (oral and written form). For admission to the exam, the student, in accordance with the curriculum, is obliged to complete 5 individual tasks, pass the test and abstract.