PROMISING METHODS AND INSTRUMENTS FOR NON-DESTRUCTIVE TESTING OF MATERIALS AND STRUCTURES

(name of the discipline)

ANNOTATION TO THE CURRICULUM OF THE INSTITUTION OF HIGHER EDUCATION

Specialty 1-70 03 01 Highways	
Direction of specialty	
Specialization	

	Form of higher education	
	Full-time (daytime)	Correspondence
Well	four	5
Semester	eight	ten
Lectures, hours	16	four
Laboratory classes, hours	16	four
Report, semester	eight	ten
Exam, semester	-	
Classroom hours per academic discipline	32	eight
Independent work, hours	16	40
	48/1	
Total hours per academic		
discipline/ credit units		

1. Brief content of the discipline

The purpose of teaching this discipline is to familiarize students with the requirements of regulatory documents, the instrument base, methodological and technological issues of using non-destructive testing to assess the quality indicators of materials, products and elements of road structures.

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

know: the main defects affecting the technological and operational properties of materials, products and elements of road structures, the requirements of regulatory documents for them; methods and means of non-destructive testing of the parameters of materials, products and elements of road structures;

be able to: choose the method and means of NDT for specific objects, evaluate their capabilities; carry out, in accordance with the instructions, quality control of materials, products and elements of road structures using modern instruments and techniques;

own: skills of working with basic reference and regulatory documents for the control of materials, products and elements of road structures; skills in the use of standard and modern methods, instruments and equipment when testing materials, products and elements of road structures.

3. Formed competencies

PC-7. Evaluate the reliability and durability of road structures based on the results of scientific research. PC-15. Use measuring instruments, know their main characteristics and rules for using measuring instruments. SLK-2. Be capable of social interaction. SLK-3. Possess the ability for interpersonal communication. SLK-4. Be able to work in a team.

4. Requirements and forms of current and intermediate certification.

To assess knowledge, intermediate certification is used in the form of defense of laboratory work and current certification in the form of a test.