EDUCATIONAL AND RESEARCH WORK OF STUDENTS

(name of the discipline)

ANNOTATION
TO THE CURRICULUM OF THE INSTITUTION OF HIGHER EDUCATION

Speciality1-54 01 02 - Methods and instruments for quality control and diagnostics of the state of objects

Specialization1-54 01 02 02 Non-destructive testing of materials and products

	Form of higher education		
	Full-time (daytime)	Correspondence	Correspondence abbreviated
Well	four		
Semester	7.8		
Practical (seminar) lessons,watch	46		
Report, semester	7.8		
Classroom hours for academic discipline (including hours on managed independent work)	46		
Independent work, hours	86		
Total hours per academic discipline / credit units	132/4		

1. Brief content of the discipline

The objectives of the discipline are to systematize and consolidate the theoretical knowledge necessary for an engineer to create new effective methods of non-destructive testing; development of skills and abilities for a comprehensive solution of technical problems in the development of methods and control devices.

2. Learning Outcomes

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

know: the methodology for choosing the direction of scientific research, identifying characteristic features and contradictions for motivating scientific research, methods for analyzing the object of control, defects, the methodology for choosing informative parameters of the object of control, the methodology for preparing for experimental research and conducting them, methods for processing the results of scientific research and presenting them;

be able to: analyze the terms of reference for the object of study and literature, prepare the basis for conducting experimental studies, conduct research and evaluate the quality of the experiment, develop proposals for using the results obtained. possess: the skills of setting up and operating instruments and devices for non-destructive testing and diagnostics; an idea of the types and methods of forming requirements for parameters, equipment and preparation of regulatory documentation; understanding of such concepts as the detectability of defects, sensitivity, resolution of various NDT methods.

3. Formed competencies

The development of this academic discipline should ensure the formation of the following competencies: SC-10 - Be able to independently analyze the problem and conduct theoretical and experimental research.

4. Requirements and forms of current and intermediate certification: individual tasks and credits (oral and written form). In order to be admitted to the test, the student, in accordance with the curriculum, must complete individual tasks.