NON-DESTRUCTIVE TESTING AT NPP

(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	4		
Semester	7		
Lectures, hours	40		
USR (hour)	8		
Report, semester	7		
Classroom hours for academic discipline (including hours on managed independent work)	48		
Independent work, hours	60		
Total hours per academic discipline / credit units	108/3		

1. Brief content of the discipline

The objectives of the academic discipline are the systematization and consolidation of theoretical knowledge on the organization, standardization and implementation of non-destructive testing of elements of NPP power equipment.

2. Learning Outcomes

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

know: the characteristics and defects of NPP equipment elements, the relationship of non-destructive testing with the strength and service life of equipment, the rules and standards of control in the nuclear power industry, a comprehensive system of operational control, modern aspects of the organization of non-destructive testing at nuclear power enterprises.

be able to: choose the optimal method and means of NDT for specific objects, evaluate their capabilities in terms of achieving maximum information content and reliability, evaluate the quality of controlled objects and predict their technical condition and performance based on the results of control, organize a metal NDT laboratory at an energy enterprise;

own: an idea of the types and methods of forming requirements for parameters, equipment and preparation of regulatory documentation and maintenance personnel for NDT and diagnostics in the nuclear power industry.

3. Formed competencies

The development of this academic discipline should ensure the formation of the following competencies: SK-22 - Apply physical methods, instruments and control systems for power equipment with the greatest technical and economic effect.

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