STUDENT ACADEMIC ANS RESEARCH ACTIVITIES
ABSTRACT
TO THE EDUCATIONAL INSTITUTION'S CURRICULUM

Specialization 6-05-0716-03 Information and Measuring Instruments and Systems
Specialization: Information Technologies and Systems for Non-Destructive Testing and Diagnostics

The distribution of academic discipline by semester

	Form of obtaining higher education	
	Full-time (daytime)	Correspondence abbreviated
Well	4	4
Semester	7, 8	7,8
Practical classes	62	14
Course project, semester	7, 8	7,8
Exam, semester	62	14
Independent work, hours	60	108
Total hours per academic discipline / credit units	122/4	

1. Course Summary

This course covers the study of the methodological foundations of scientific research applied to non-destructive testing and diagnostics. Particular attention is paid to the practical use of various physical phenomena and effects, methods, and apparatuses for their description and analysis, as well as the search for more effective means of transforming and processing the obtained information.

2. Learning Outcomes

Upon completion of this course, the student should understand the methodology for selecting a research direction, identifying characteristic features and contradictions to motivate research, methods for analyzing test objects and defects, and methods for preparing and conducting research. They should also be able to analyze literary sources, conduct theoretical and experimental research, process the results, and develop proposals for their use. They should also possess the skills to configure and operate instruments and present research results in accordance with regulatory requirements.

3. Developed Competencies

The study of this discipline should contribute to the development of the following competencies: the ability to independently analyze a problem and conduct theoretical and experimental research.

4 Requirements and Forms of Current and Midterm Assessment

Current assessment is carried out based on students' defense of individual assignments, as well as their completion of control works. Both oral and written forms of conduct are used.

Interim assessment – pass/fail exam. Conducted orally.