

EXPERT SYSTEMS IN NONDESTRUCTIVE TESTING AND DIAGNOSTICS

ANNOTATION TO THE WORKING PROGRAM OF DISCIPLINE

Specialty 7-06-0716-03 "Instrumentation Engineering"

Specialization (profile): Information systems and technologies of nondestructive testing and diagnostics"

	Form of higher education	
	Full-time (daytime)	Distance learning
Course	1	2
Semester	2	3
Lectures, hours	16	4
Practical training, hours	34	8
Test, semester	2	3
Auditorium hours in the academic discipline	50	12
Independent work, hours	58	96
Total hours in the academic discipline / credit units	108/3	

1 Purpose of the training discipline

The purpose of the discipline is to familiarize students with the ability to apply methods, techniques and technologies of building expert systems in non-destructive testing and diagnostics.

2 Planned results of studying the discipline

As a result of mastering the discipline, a master student should

know:

- types of systems and their models;
- approaches to the formation of knowledge bases;
- types of expert systems;
- stages of expert systems development;
- technologies of construction of expert systems.

be able to:

- develop knowledge bases for expert systems;
- to apply in practice the technologies of expert systems construction.

To have the skill:

- development of expert systems.

3 Requirements for mastering the academic discipline

Mastering of this academic discipline shall ensure the formation of the following competencies:

Names of competencies to be formed
Able to optimize the structure and functionality of nondestructive testing systems, develop methods of control of industrial objects

4 Requirements and forms of midcourse evaluation and summative assessment

Current certification - defense of practical works.

Intermediate certification - exam, oral.