

DESIGN OF INSTRUMENTS AND CONTROL SYSTEMS

(name of the discipline)

ANNOTATION TO THE CURRICULUM OF THE INSTITUTION OF HIGHER EDUCATION

Speciality 1-54 01 02 Methods and instruments for quality control and diagnostics object states

Direction of speciality

Specialization 1-54 01 02 02 - Non-destructive testing of materials and products

	Form of higher education
	Full-time (daytime)
Well	4
Semester	8
Lectures, hours	28
Laboratory classes, hours	42
Course project, semester	8
Exam, semester	8
Classroom hours per academic discipline	70
Independent work, hours	38
Total hours per academic discipline / credit units	108/3

1. Brief content of the discipline

The purpose of teaching this discipline is to familiarize students with the requirements of regulatory documents, teaching the general strategy for designing devices and systems for non-destructive testing, teaching modern design methods using computer-aided design (CAD), acquiring practical skills in solving modern design problems.

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

– know: the basic principles and approaches used in the design of devices and systems; design stages and development stages of devices and systems; modern classification of devices, to study the functional structure of devices and their components; physical foundations and principles for constructing devices and systems and about the prospects for their development; capabilities of modern CAD tools;

– be able to: apply technical and software CAD; set and solve problems using application programs;

– possess: the ability to rationally design devices and systems for non-destructive testing, design using automated software tools.

3. Formed competencies SK-4. Be able to develop designs of assembly units, assemblies and parts of non-destructive testing devices

4. Requirements and forms of current and intermediate certification. For estimates knowledge are used intermediate attestation in form protection laboratory work and current certification - in the form of an exam.