

# DEVICES AND METHODS FOR THERMAL AND RADIO WAVE CONTROL

## ANNOTATION TO THE CURRICULUM OF THE INSTITUTION OF HIGHER EDUCATION

**Speciality**1-54 01 02 - Methods and instruments for quality control and condition diagnostics objects

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

	Form of higher education
	Full-time (daytime)
Well	3
Semester	6
Lectures, hours	34
Laboratory classes, hours	16
Exam, semester	6
Classroom hours per academic discipline	50
Independent work, hours	58
Total hours per academic discipline / credit units	108/3.0

**1. Brief content of the discipline.** The discipline is aimed at students studying the theoretical foundations, methods and areas of application of thermal and radio wave control to the extent that is necessary for students to get a complete picture of the current state, prospects and ways of developing this type of control.

**2. Learning Outcomes.** As a result of mastering the academic discipline, the student must know:

- physical foundations of thermal and radio wave control;
- principles of construction of thermal imaging and radio wave devices for various purposes.

be able to:

- correctly choose and apply methods of thermal and radio wave control;
- be able to set up and use devices and with their help solve the

corresponding measuring tasks;

own:

- skills in the implementation of modern technologies for thermal and radio wave control of materials, products, skills in assessing the quality of controlled objects.

**3. Formed competencies:** SK-17 be able to select the technical means of thermal and radio wave non-destructive testing in accordance with the characteristics of the object.

**4. Requirements and forms of current and intermediate certification:** exam (written form). In order to be admitted to the exam, the student, in accordance with the curriculum, must complete and defend laboratory work, as well as intermediate tests.