

## ELECTRONICS

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

**Specialty 1-54 01 02** - "Methods and instruments for quality control and diagnostics of the state of objects"

	Form of higher education
	Full-time (daytime)
Well	2.3
Semester	4.5
Lectures, hours	68
Practical (seminar) classes, hours	68
Laboratory classes, hours	68
Course project, semester	4.5
Exam, semester	4.5
Classroom hours per academic discipline	204
Independent work, hours	120
Total hours per academic discipline / credits	324/9

#### 1. Brief content of the discipline.

The discipline deals with: the device and principle of operation of elements of electronic technology, the basic principles of construction and operation of typical circuits and components of analog and digital devices, the rules for their development and calculation.

#### 2. Learning outcomes. As a result of mastering the academic discipline, the student must

- **know:** physical bases of work of elements of electronic equipment; basic principles of construction and operation of typical circuits and units of analog and digital devices; rules for the development and design of electrical circuits;

- **be able to:** determine the characteristics of the elements used in electronic circuits; analyze the operation of typical circuits and units of analog and digital devices; measure the main parameters of electronic devices;

- **own:** calculation methods for typical circuits and units of analog and digital devices; calculations of the main parameters of electronic devices; modeling typical units of electronic circuits.

#### 3. Competences to be formed: BOD-9 - "To be able to calculate typical circuits of analog and digital devices."

#### 4. Requirements and forms of current and intermediate certification.

- Written form: tests, term papers, written examinations.
- Oral and written form: reports on laboratory work with their oral defense.
- Technical form: visual labs.