

CIRCUITRY OF DIGITAL DEVICES

ANNOTATION TO THE WORK PROGRAM

Specialty 7-06-0716-03 – Instrument engineering

Profiling: Information systems and technologies for non-destructive testing and diagnostics

	Full-time education	By correspondence education
Course	2	2
Term	3	4
Lectures, hours	16	4
Practical (seminar) classes, hours	34	8
Credit, semester	3	4
Classroom hours per academic discipline	50	12
Independent work, hours	90	128
Total hours of academic discipline / credits	140/4	140/4

1. Summary of the academic discipline

The academic discipline studies the circuitry of digital electronic devices, methods of their calculation and modeling of operation in various modes, issues of designing electronic devices for non-destructive testing and diagnostics devices.

2. Learning outcomes

As a result of mastering the discipline, the student must

to know:

- the basic principles of operation of standard circuits and nodes of digital devices;
- rules for the development of electrical circuits of digital devices;

be able to:

- develop typical circuits of digital devices;
- calculate the parameters of the elements of digital devices;

have a skill:

- design standard diagrams of digital device nodes;
- simulate the operation of typical nodes of digital devices.

3. Emerging competence:

is capable of synthesizing and calculating circuits of digital electronic devices

4. Requirements and forms of current and intermediate certification.

Forms and methods of conducting classes: traditional, computer-based, calculated, lectures-consultations, intermediate certification – credit (oral).