

PROGRAMMABLE DIGITAL DEVICES

COURSE SYLLABUS ABSTRACT

6-05-0716-03—"Information measuring devices and systems"

Specialization: Information systems and technologies of non-destructive testing and diagnostics

	STUDY MODE	
	full-time	part-time (shortened program)
Year	3	3
Semester	6	6
Lectures, hours	34	6
Laboratory classes, hours	16	4
Exam, semester	6	6
Contact hours	50	
Independent study, hours	58	
Total course duration in hours / credit units	108/3	108

1. Course outline

The academic discipline examines modern electronic programmable digital devices used in instrument engineering, their parameters and characteristics, operating modes, and the basics of developing software for them to perform control, measurement, or diagnostic tasks.

2. Course learning outcomes

Upon completion of the course, students will be expected to know:

- basic principles of construction and operation of standard circuits and nodes of programmable digital devices;

- software development methodology; be able to:

- be able to:

- develop device circuits based on programmable digital devices;

- develop software for the designed devices;

- to possess a skill:

- designing standard circuits and nodes of programmable digital devices;

- performing experimental studies of programmable digital devices and software for them.

3. Competencies: –Be able to develop software for programmable devices.

4. Requirements and forms of midcourse evaluation and summative assessment:

- current - laboratory protection;

- intermediate - written exam.