

ELECTRIC AND ELECTRONIC DEVICES

COURSE SYLLABUS ABSTRACT

6-05-0713-04 Automation of technological processes and production
(speciality code and name)

Automated electric drives
(concentration)

	STUDY MODE		
	full-time	part-time	part-time (shortened program)
Year	3	4	3
Semester	5	7	5
Lectures, hours	34	6	6
Laboratory classes, hours	34	6	6
In-class test (semester, hours)		7 (2 ч)	5 (2)
Exam, semester	5	7	5
Contact hours	68	14	14
Independent study, hours	40	94	94
Total course duration in hours / credit units	108/3		

1. Course outline

The purpose of teaching the discipline "Electrical and electronic devices" is to provide students with knowledge of the theory and designs of low voltage electrical devices.

2. Course learning outcomes

Upon completion of the course, students will be expected to

know:

- electrical devices as a means of controlling the operating modes, protecting and regulating the parameters of electrical and electrical power systems;
- the capabilities of electrical apparatus when used in automated electric drive systems and in automatic process control systems;

be able to:

- apply and make a choice of electrical devices;
- design circuits for electrical devices;

to possess a skill:

- selecting electrical devices;
- constructing circuits on electrical devices.

3. Competencies

To know the design, range, principles of operation of electronic and electrical devices for use in automated electric drive systems. To be able to carry out the choice of electrical and electronic devices for automated electric drive systems.

4. Requirements and forms of midcourse evaluation and summative assessment

Current control involves assessing the performance and defense of laboratory work.

To assess the quality of assimilation of educational material by students, an intermediate assessment is conducted in the form of an exam.