

**ELECTRICAL ENGINEERING And ELECTRONICS**  
**ANNOTATION**  
**To TRAINING PROGRAM INSTITUTIONS HIGHER EDUCATION**

**Specialty 1-36 01 04 "Equipment and technologies for highly efficient processes materials processing owls"**

	The form receiving higher education
	full-time (daily)
Well	2
Semester	four
Lectures, hours	fifty
Practical (seminar) lessons, watch	16
Laboratory lessons, watch	16
credit differentiated, semester	four
classroom hours on educational discipline	82
Independent Work, watch	38
Total hours on educational discipline / test units	120/3

1. Brief content of the discipline. The discipline belongs to the module "Electrical engineering and electronics" and contains two block: "Electrical Engineering" and "Electronics". The task of the discipline is the formation of a concept of the principles of operation and design of electronic devices, experimental study them work in various modes on the laboratory installations and COMPUTER, a also application electronic and digital devices at solution of various technical problems.

2. results learning. AT result development educational disciplines student must

- know: electrical laws and methods of analysis of electrical and magnetic circuits; appointment and principle actions main nodes contemporary equipment, containing electrical machines, devices and elements of automation, electrical measuring devices; electrical terminology and symbols.
- be able to: experimentally determine the parameters and characteristics of typical electrical devices; turn on electrical devices and machines, manage them and control their efficient and safe operation; competently draw up technical specifications for the development automated control systems for production processes together with electrical engineers.
- own: methodology choice electrotechnical products for ensure functioning electrical machines and devices; reading technique electrical circuits and characterization of typical electrical devices.

3. Formed competencies: BOD-14 - Know the basic laws of electrical engineering, methods for calculating and measuring the parameters of electrical circuits, the principles of operation and the design of electrical and electronic devices and devices.

4. Requirements and forms of the current attestation: differentiated test (oral form). In order to be admitted to the test, the student, in accordance with the curriculum, must complete and defend laboratory work, as well as individual tasks.