

List of subjects for “Electric power engineering and electric equipment”

Major - Electric power systems, networks, electricity transmission, their modes and reliability

1. Foreign language in professional sphere
2. Research basics
3. World view safety basics
4. Mathematical modeling and information technologies in design
5. Organization of cognitive, educational and scientific activities
6. Electrical apparatuses
7. Chemical reactors, fuel cells, electrochemical units
8. Tribological systems for hydraulic and pneumatic devices
9. Energy saving technologies in energy sector
10. Modern problems of production, transmission and distribution of electricity
11. Modern measuring equipment for hydraulic and pneumatic systems
12. Methods of calculation and optimization of electric power systems modes
13. Reactive power compensation in electrical systems
14. Special modes and stability of electric power systems
15. Electric lighting
16. Automation of power systems
17. Electric supply system
18. Theory of electric power systems reliability
19. Methods of calculation of transients in electrical systems
20. Electrotechnical complexes and control systems of electrical units mechanisms
21. Microprocessor equipment in regulation of technological parameters
22. Application of power electronics and microprocessors in electrical complexes
23. Testing of electrical equipment for technological systems
24. Methods of identification electrotechnical complexes and systems facilities
25. Operating modes of electrical equipment for technological systems
26. Microprocessor devices for power-system protection and emergency automatics for electric power systems
27. Consumers of electric energy
28. Electronic devices of electromechanical systems
29. Optimization of power consumption in electrical appliances and use of renewable energy sources
30. Design of modern microcontroller devices for control of electrical devices
31. Microprocessor technology in electrical apparatuses
32. Sensors of electrical and non-electrical quantities in electrical engineering, electromechanics and electrical technology
33. Information-measuring and electronic devices and appliances
34. Modern computational methods
35. Switching problems in high and low voltage electrical devices
36. Education internship (internship for getting primary professional skills, including skills for research)
37. Production internship (internship for getting professional skills and experience in the field of study)
38. Production internship (pre-diploma)

39. Research
40. State exams

Major – Electric equipment and electrical facilities of enterprises and organizations

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40. State exams

Major - Electric and electronic devices

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5. Organization of cognitive, educational and scientific activities
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11. Modern measuring equipment for hydraulic and pneumatic systems
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13. Optimization of power consumption in electrical appliances and use of renewable energy sources
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18. Modern computational methods
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22. Production internship (internship for getting professional skills and experience in the field of study)
23. research
24. STATE EXAMS
25. Principles of design and algorithms of microprocessor electric-power protection
26. Effective connection contacts in electrical apparatus