Bachelor Program: 4 years

Institute: Institute of Power Engineering

Study Program: Electric Power Engineering and Technology

Profile: Automated Electrical Systems

Language of Training: Russian

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **№** | **Subject** | **Semester** | **Hours** | **Credits** |
| B.1.1.1 | History | 1 | 72 | 2 |
| B.1.1.1 | History | 2 | 72 | 2 |
| B.1.1.2 | Philosophy | 5 | 108 | 3 |
| B.1.1.3 | Foreign language | 1 | 108 | 3 |
| B.1.1.3 | Foreign language | 2 | 108 | 3 |
| B.1.1.3 | Foreign language | 3 | 72 | 2 |
| B.1.1.4 | The rule of law and modernity | 3 | 72 | 2 |
| B.1.1.5 | Psychology | 4 | 72 | 2 |
| B.1.1.6 | Higher Mathematics | 1 | 252 | 7 |
| B.1.1.6 | Higher Mathematics | 2 | 180 | 5 |
| B.1.1.6 | Higher Mathematics | 3 | 180 | 5 |
| B.1.1.7 | Equations of mathematical physics | 4 | 108 | 3 |
| B.1.1.8 | Computer science | 1 | 144 | 4 |
| B.1.1.8 | Computer science | 2 | 72 | 2 |
| B.1.1.9 | Physics | 1 | 216 | 6 |
| B.1.1.9 | Physics | 2 | 144 | 4 |
| B.1.1.10 | Theoretical foundations of electrical engineering | 3 | 216 | 6 |
| B.1.1.10 | Theoretical foundations of electrical engineering | 4 | 144 | 4 |
| B.1.1.11 | Electrical and electronic devices | 5 | 144 | 4 |
| B.1.1.12 | Technical mechanics | 3 | 144 | 4 |
| B.1.1.13 | Fundamentals of project activity | 3 | 72 | 2 |
| B.1.1.14 | Electric machines | 4 | 108 | 3 |
| B.1.1.14 | Electric machines | 5 | 180 | 5 |
| B.1.1.15 | Engineering and computer graphics | 1 | 72 | 2 |
| B.1.1.15 | Engineering and computer graphics | 2 | 108 | 3 |
| B.1.1.16 | Electrical and Structural Materials Science | 2 | 72 | 2 |
| B.1.1.16 | Electrical and Structural Materials Science | 3 | 144 | 4 |
| B.1.1.17 | Time management | 1 | 72 | 2 |
| B.1.1.18 | Operating safety | 7 | 72 | 2 |
| B.1.1.19 | Fundamentals of business communication | 1 | 72 | 2 |
| B.1.1.20 | Industrial Electronics | 4 | 144 | 4 |
| B.1.1.21 | Metrology, standardization, certification | 4 | 72 | 2 |
| B.1.1.22 | Information and measuring equipment | 5 | 108 | 3 |
| B.1.1.23 | Chemistry | 3 | 108 | 3 |
| B.1.1.24 | Ethics of professional activity | 7 | 72 | 2 |
| B.1.1.25 | Physical culture and sports | 1 | 72 | 2 |
| B.1.2.1 | Economics | 2 | 108 | 3 |
| B.1.2.2 | General energy | 5 | 72 | 2 |
| B.1.2.3 | Fundamentals of electrical safety | 8 | 108 | 3 |
| B.1.2.4 | Numerical methods for solving problems | 7 | 72 | 2 |
| B.1.2.5 | Ecology | 6 | 72 | 2 |
| B.1.2.6 | Automated electric drive | 7 | 144 | 4 |
| B.1.2.7 | Promising electrical technologies | 3 | 72 | 2 |
| B.1.2.8 | Power Electronics | 5 | 108 | 3 |
| B.1.2.9 | Theory of electric heating | 4 | 72 | 2 |
| B.1.2.10 | Ultrahigh frequency electrotechnological installations | 6 | 108 | 3 |
| B.1.2.11 | Automatic control systems for electrotechnological installations and systems | 7 | 144 | 4 |
| B.1.2.12 | Power supply and electrical equipment of electrotechnological installations and systems | 7 | 180 | 5 |
| B.1.2.13 | Modeling of technological processes in electrotechnological installations and systems | 8 | 72 | 2 |
| B.1.2.14 | Design, construction, installation and operation of electrotechnological installations and systems | 8 | 72 | 2 |
| B.1.2.15 | Electrical engineering hardware | 6 | 144 | 4 |
| B.1.2.16 | Computer modeling of electrotechnological installations | 7 | 216 | 6 |
| B.1.2.17 | Electrotechnological installations and systems | 5 | 216 | 6 |
| B.1.2.18 | Theory of automatic control | 6 | 144 | 4 |
| B.1.2.19 | Technical means of automation of electrotechnological installations and systems | 8 | 180 | 5 |
| B.1.3.1.1 | Electrodynamics | 4 | 144 | 4 |
| B.1.3.1.2 | Theory of heat and mass transfer | /4 | /144 | /4 |
| B.1.3.1.3 | Military training | /4 | /144 | /4 |
| B.1.3.2.1 | Ultrahigh frequency technology | 5 | 144 | 4 |
| B.1.3.2.2 | High frequency current technology | /5 | /144 | /4 |
| B.1.3.2.3 | Military training | /5 | /144 | /4 |
| B.1.3.3.1 | Resistance Furnaces | 6 | 180 | 5 |
| B.1.3.3.2 | Electrochemical and electrophysical treatment plants | /6 | /180 | /5 |
| B.1.3.3.3 | Military training | /6 | /180 | /5 |
| B.1.3.4.1 | Power supplies for electrotechnological installations | 7 | 180 | 5 |
| B.1.3.4.2 | The element base of electrotechnological installations | /7 | /180 | /5 |
| B.1.3.4.3 | Military training | /7 | /180 | /5 |
| B.1.3.5.1 | Mechanisms and drives of electrotechnological installations | 8 | 108 | 3 |
| B.1.3.5.2 | Auxiliary systems of electrotechnological installations | /8 | /108 | /3 |
| B.1.3.5.3 | Military training | /8 | /108 | /3 |
| B.1.3.6.1 | Induction and high-frequency installations | 6 | 108 | 3 |
| B.1.3.6.2 | Electromechanical and electrokinetic treatment plants | /6 | /108 | /3 |
| B.1.3.7.1 | Arc furnaces and special heating installations | 6 | 108 | 3 |
| B.1.3.7.2 | Special metallurgy installations | /6 | /108 | /3 |
| B.1.3.8.1 | Sports games | 2 | 82 | 0 |
| B.1.3.8.1 | Sports games | 3 | 82 | 0 |
| B.1.3.8.1 | Sports games | 4 | 82 | 0 |
| B.1.3.8.1 | Sports games | 5 | 38 | 0 |
| B.1.3.8.1 | Sports games | 6 | 44 | 0 |
| B.1.3.8.2 | Recreational physical culture | /2 | /82 | 0 |
| B.1.3.8.2 | Recreational physical culture | /3 | /82 | 0 |
| B.1.3.8.2 | Recreational physical culture | /4 | /82 | 0 |
| B.1.3.8.2 | Recreational physical culture | /5 | /38 | 0 |
| B.1.3.8.2 | Recreational physical culture | /6 | /44 | 0 |
|  | **Total** |  | **7780** | **207** |