Specialty Program: 5,5 years

Institute: Institute of Electronic Engineering & Instrumentation

Study Program: Radio-electronic Systems and Facilities

Specialization: Radio-Electronic Information Transmission Systems

Language of Training: Russian

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **№** | **Subject** | **Semester** | **Hours** | **Credits** |
| С.1.1.1 | History | 1 | 72 | 2 |
| С.1.1.1 | History | 2 | 72 | 2 |
| С.1.1.2 | Philosophy | 5 | 108 | 3 |
| С.1.1.3 | Foreign language | 1 | 108 | 3 |
| С.1.1.3 | Foreign language | 2 | 108 | 3 |
| С.1.1.3 | Foreign language | 3 | 72 | 2 |
| С.1.1.4 | Engineering graphics (drawing) | 1 | 72 | 2 |
| С.1.1.5 | Descriptive geometry and computer graphics | 2 | 108 | 3 |
| С.1.1.6 | Probability theory and mathematical statistics | 3 | 180 | 5 |
| С.1.1.7 | Computer science | 1 | 180 | 5 |
| С.1.1.7 | Computer science | 2 | 180 | 5 |
| С.1.1.8 | Physics | 1 | 180 | 5 |
| С.1.1.8 | Physics | 2 | 180 | 5 |
| С.1.1.8 | Physics | 3 | 180 | 5 |
| С.1.1.8 | Physics | 4 | 144 | 4 |
| С.1.1.9 | Operating safety | 5 | 108 | 3 |
| С.1.1.10 | Higher Mathematics | 1 | 180 | 5 |
| С.1.1.10 | Higher Mathematics | 2 | 180 | 5 |
| С.1.1.11 | Organization and management of enterprises | 4 | 108 | 3 |
| С.1.1.12 | Circuit design | 7 | 180 | 5 |
| С.1.1.13 | Metrology, standardization and certification | 5 | 144 | 4 |
| С.1.1.14 | Fundamentals of design and production technology of electronic means | 6 | 108 | 3 |
| С.1.1.15 | Ecology | 4 | 72 | 2 |
| С.1.1.16 | Theoretical foundations of electrical engineering | 3 | 108 | 3 |
| С.1.1.16 | Theoretical foundations of electrical engineering | 4 | 144 | 4 |
| С.1.1.17 | The rule of law and modernity | 2 | 72 | 2 |
| С.1.1.18 | Materials of electronic equipment | 3 | 144 | 4 |
| С.1.1.19 | Sociology | 3 | 108 | 3 |
| С.1.1.20 | Components of electronic equipment | 4 | 144 | 4 |
| С.1.1.21 | Theoretical foundations of radio engineering | 5 | 180 | 5 |
| С.1.1.21 | Theoretical foundations of radio engineering | 6 | 144 | 4 |
| С.1.1.22 | Microprocessor devices | 7 | 144 | 4 |
| С.1.1.23 | Physical culture and sports | 1 | 72 | 2 |
| С.1.1.24 | Fundamentals of computer-aided design and modeling of electronic means | 9 | 216 | 6 |
| С.1.1.25 | Digital signal processing | 6 | 144 | 4 |
| С.1.1.26 | Radio automation | 7 | 216 | 6 |
| С.1.1.27 | Devices for generating and forming of signals | 9 | 252 | 7 |
| С.1.1.28 | Signal reception and processing devices | 10 | 252 | 7 |
| С.1.1.29 | Fundamentals of the theory of radar systems and complexes | 8 | 180 | 5 |
| С.1.1.30 | Fundamentals of the theory of radio navigation systems and complexes | 8 | 108 | 3 |
| С.1.1.31 | Fundamentals of the theory of radio systems and control complexes | 9 | 108 | 3 |
| С.1.1.32 | Fundamentals of the theory of radio information transmission systems | 10 | 216 | 6 |
| С.1.1.33 | Fundamentals of the theory of electronic warfare systems and complexes | 10 | 180 | 5 |
| С.1.2.1 | Philosophy of Science and Technology | 6 | 72 | 2 |
| С.1.2.2 | Mobile radio communication systems | 3 | 108 | 3 |
| С.1.2.3 | Digital information transmission systems | 6 | 144 | 4 |
| С.1.2.4 | Physics of vibrational and wave processes | 7 | 144 | 4 |
| С.1.2.5 | Algorithms, languages and programs for solving radio engineering problems | 6 | 72 | 2 |
| С.1.2.6 | Synchronization methods and devices in information transmission radio systems | 10 | 108 | 3 |
| С.1.2.7 | Methods of mathematical physics | 5 | 144 | 4 |
| С.1.2.8 | Electroconverting devices of radio-electronic means | 9 | 108 | 3 |
| С.1.2.9 | Fundamentals of management | 8 | 144 | 4 |
| С.1.2.10 | Radio engineering systems | 8 | 180 | 5 |
| С.1.2.11 | Electrodynamics and propagation of radio waves | 7 | 180 | 5 |
| С.1.2.12 | Theory of electrical communication | 4 | 180 | 5 |
| C.1.2.13 | Discrete mathematics | 5 | 144 | 4 |
| С.1.2.14 | Fundamentals of electromagnetic compatibility of radio-electronic means | 8 | 180 | 5 |
| С.1.2.15 | Nonlinear and parametric phenomena in radio engineering systems | 9 | 144 | 4 |
| С.1.3.1.1 | Psychology | 3 | 108 | 3 |
| С.1.3.1.2 | Engineering Psychology | /3 | /108 | /3 |
| С.1.3.2.1 | History of science and technology | 2 | 72 | 2 |
| С.1.3.2.2 | History of Russian Culture | /2 | /72 | /2 |
| С.1.3.3.1 | Numerical solution of radio engineering and communication problems | 1 | 108 | 3 |
| С.1.3.3.2 | Modern problems of radiophysics | /1 | /108 | /3 |
| С.1.3.4.1 | Microwave and optical range devices | 6 | 108 | 3 |
| С.1.3.4.2 | Solid-state microwave devices | /6 | /108 | /3 |
| С.1.3.5.1 | PC Operating Systems | 4 | 144 | 4 |
| С.1.3.5.2 | Computer networks, protocols, interfaces | /4 | /144 | /4 |
| С.1.3.5.3 | Military training | /4 | /144 | /4 |
| С.1.3.6.1 | Programming in a high-level language | 5 | 144 | 4 |
| С.1.3.6.2 | Basics of Visual Programming | /5 | /144 | /4 |
| С.1.3.6.3 | Military training | /5 | /144 | /4 |
| С.1.3.7.1 | Technical electrodynamics | 6 | 180 | 5 |
| С.1.3.7.2 | The element base of communication technology | /6 | /180 | /5 |
| С.1.3.7.3 | Military training | /6 | /180 | /5 |
| С.1.3.8.1 | Synthesis of technical systems | 7 | 180 | 5 |
| С.1.3.8.2 | Optical devices in communication systems | /7 | /180 | /5 |
| С.1.3.8.3 | Military training | /7 | /180 | /5 |
| С.1.3.9.1 | Ultra-high frequency devices and antennas | 8 | 108 | 3 |
| С.1.3.9.2 | Statistical radio engineering | /8 | /108 | /3 |
| С.1.3.9.3 | Military training | /8 | /108 | /3 |
| С.1.3.10.1 | Theory of self-oscillating systems | 9 | 144 | 4 |
| С.1.3.10.2 | Automation of design of radio engineering devices of communication systems | /9 | /144 | /4 |
| С.1.3.11.1 | Information protection | 10 | 216 | 6 |
| С.1.3.11.2 | Microwave integrated circuitry | /10 | /216 | /6 |
| С.1.3.12.1 | Sports games | 2 | 82 | 0 |
| С.1.3.12.1 | Sports games | 3 | 82 | 0 |
| С.1.3.12.1 | Sports games | 4 | 82 | 0 |
| С.1.3.12.1 | Sports games | 5 | 38 | 0 |
| С.1.3.12.1 | Sports games | 6 | 44 | 0 |
| С.1.3.12.2 | Recreational physical culture | /2 | /82 | 0 |
| С.1.3.12.2 | Recreational physical culture | /3 | /82 | 0 |
| С.1.3.12.2 | Recreational physical culture | /4 | /82 | 0 |
| С.1.3.12.2 | Recreational physical culture | /5 | /38 | 0 |
| С.1.3.12.2 | Recreational physical culture | /6 | /44 | 0 |
|  | **Total** |  | **10048** | **270** |