Bachelor Program: 4 years

Institute: Institute of Physics and Technology

Study Program: System Analysis and Management

Profile: System Analysis and Management

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 | Economy | 4 | 72 | 2 |
| B.1.1.5 | Psychology | 3 | 72 | 2 |
| B.1.1.6 | Russian language and speech culture | 1 | 72 | 2 |
| B.1.1.7 | Mathematics | 1 | 216 | 6 |
| B.1.1.7 | Mathematics | 2 | 216 | 6 |
| B.1.1.7 | Mathematics | 3 | 144 | 4 |
| B.1.1.8 | Computer science | 1 | 108 | 3 |
| B.1.1.9 | Computer architecture | 2 | 108 | 3 |
| B.1.1.10 | Physics | 1 | 144 | 4 |
| B.1.1.10 | Physics | 2 | 144 | 4 |
| B.1.1.10 | Physics | 3 | 108 | 3 |
| B.1.1.11 | Chemistry | 1 | 108 | 3 |
| B.1.1.12 | Ecology | 2 | 72 | 2 |
| B.1.1.13 | Engineering graphics (drawing) | 1 | 72 | 2 |
| B.1.1.14 | Descriptive geometry and computer graphics | 2 | 108 | 3 |
| B.1.1.15 | Theoretical mechanics | 3 | 108 | 3 |
| B.1.1.16 | Materials Science | 2 | 72 | 2 |
| B.1.1.17 | Theoretical foundations of electrical engineering and electronics | 4 | 144 | 4 |
| B.1.1.18 | Theory of automatic control | 5 | 216 | 6 |
| B.1.1.19 | System analysis, optimization and decision-making | 6 | 216 | 6 |
| B.1.1.20 | Operating safety  | 8 | 108 | 3 |
| B.1.1.21 | Theory and technology of programming | 3 | 216 | 6 |
| B.1.1.22 | Theory of information systems | 7 | 144 | 4 |
| B.1.1.23 | Intelligent technologies and knowledge representation | 7 | 72 | 2 |
| B.1.1.24 | Modeling of systems | 7 | 72 | 2 |
| B.1.1.25 | Metrology, standardization and certification | 7 | 72 | 2 |
| B.1.1.26 | Management in organizational systems | 4 | 108 | 3 |
| B.1.1.27 | Databases | 7 | 108 | 3 |
| B.1.1.28 | Physical culture and sports | 1 | 72 | 2 |
| B.1.2.1 | Philosophy of Science and Technology | 6 | 72 | 2 |
| B.1.2.2 | Computational mathematics | 3 | 180 | 5 |
| B.1.2.2 | Computational mathematics | 4 | 180 | 5 |
| B.1.2.3 | Mathematical methods of physics | 5 | 180 | 5 |
| B.1.2.3 | Mathematical methods of physics | 6 | 180 | 5 |
| B.1.2.4 | Theory of probability and statistics | 4 | 144 | 4 |
| B.1.2.5 | Analytical planning | 5 | 180 | 5 |
| B.1.2.6 | Mathematical modeling of controlled dynamic systems | 7 | 180 | 5 |
| B.1.2.6 | Mathematical modeling of controlled dynamic systems | 8 | 180 | 5 |
| B.1.2.7 | Statistical conclusions and econometric models | 5 | 180 | 5 |
| B.1.2.8 | Management decision-making methods | 6 | 108 | 3 |
| B.1.2.9 | Imitational modeling | 6 | 108 | 3 |
| B.1.2.10 | Organizational and economic modeling | 8 | 144 | 4 |
| B.1.2.11 | Neural networks | 6 | 72 | 2 |
| B.1.3.1.1 | Computer mathematics and symbolic computing packages | 7 | 72 | 2 |
| B.1.3.1.2 | Mathematical modeling in the MathCad system | /7 | /72 | /2 |
| B.1.3.2.1 | Mathematical Economics | 7 | 144 | 4 |
| B.1.3.2.2 | Mathematical methods in economics | /7 | /144 | /4 |
| B.1.3.3.1 | Mathematical programming | 4 | 144 | 4 |
| B.1.3.3.2 | Operations Research | /4 | /144 | /4 |
| B.1.3.4.1 | Fundamentals of functional materials design | 2 | 108 | 3 |
| B.1.3.4.2 | Fundamentals of composite materials design | /2 | /108 | /3 |
| B.1.3.5.1 | Heuristic and phenomenological models in modern physics | 3 | 108 | 3 |
| B.1.3.5.2 | Modeling of transfer processes in heterogeneous systems | /3 | /108 | /3 |
| B.1.3.6.1 | Fractals and chaos in dynamic systems | 4 | 144 | 4 |
| B.1.3.6.2 | Fundamentals of nonlinear dynamics | /4 | /144 | /4 |
| B.1.3.6.3 | Military training | /4 | /144 | /4 |
| B.1.3.7.1 | Visual programming environments | 5 | 144 | 4 |
| B.1.3.7.2 | Fundamentals of object-oriented programming | /5 | /144 | /4 |
| B.1.3.7.3 | Military training | /5 | /144 | /4 |
| B.1.3.8.1 | Mathematical methods of financial analysis | 6 | 180 | 5 |
| B.1.3.8.2 | Mathematical methods of economic systems | /6 | /180 | /5 |
| B.1.3.8.3 | Military training | /6 | /180 | /5 |
| B.1.3.9.1 | Quality management | 7 | 180 | 5 |
| B.1.3.9.2 | Mathematical modeling of economic systems | /7 | /180 | /5 |
| B.1.3.9.3 | Military training | /7 | /180 | /5 |
| B.1.3.10.1 | Computer architecture | 8 | 108 | 3 |
| B.1.3.10.2 | Operating systems | /8 | /108 | /3 |
| B.1.3.10.3 | Military training | /8 | /108 | /3 |
| B.1.3.11.1 | Sports games | 2 | 82 | 0 |
| B.1.3.11.1 | Sports games | 3 | 82 | 0 |
| B.1.3.11.1 | Sports games | 4 | 82 | 0 |
| B.1.3.11.1 | Sports games | 5 | 38 | 0 |
| B.1.3.11.1 | Sports games | 6 | 44 | 0 |
| B.1.3.11.2 | Recreational physical culture | /2 | /82 | 0 |
| B.1.3.11.2 | Recreational physical culture | /3 | /82 | 0 |
| B.1.3.11.2 | Recreational physical culture | /4 | /82 | 0 |
| B.1.3.11.2 | Recreational physical culture | /5 | /38 | 0 |
| B.1.3.11.2 | Recreational physical culture | /6 | /44 | 0 |
|  | **Total** |  | **7780** | **207** |