Master Program: 2 years

Institute: Institute of Physics and Technology

Study Program: Applied Mathematics and Computer Science

Profile: Mathematical Modeling

Language of Training: Russian

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| --- | --- | --- | --- | --- |
| **№** | **Subject** | **Semester** | **Hours** | **Credits** |
| М.1.1.1 | Modern problems of applied mathematics and computer science | 1 | 108 | 3 |
| М.1.1.2 | Continuous mathematical models | 2 | 108 | 3 |
| М.1.1.3 | Modern computer technologies | 1 | 108 | 3 |
| М.1.1.4 | Discrete mathematical models | 2 | 108 | 3 |
| М.1.1.5 | Foreign language for academic purposes | 2 | 72 | 2 |
| М.1.1.6 | Information expert systems | 1 | 144 | 4 |
| М.1.1.7 | Software tools for solving mathematical problems | 2 | 144 | 4 |
| М.1.1.8 | System analysis and mathematical models of decision-making | 3 | 180 | 5 |
| М.1.1.9 | Logic programming | 3 | 180 | 5 |
| М.1.1.10 | Mathematical modeling by means of Simulink and Toolbox | 1 | 108 | 3 |
| М.1.1.11 | Optimization problems of graph theory | 3 | 108 | 3 |
| М.1.1.12 | Software Development Technology | 2 | 144 | 4 |
| М.1.1.13 | Parallel programming technologies | 2 | 180 | 5 |
| M.1.2.1 | The language of business communication | 1 | 108 | 3 |
| M.1.2.2 | History and methodology of applied mathematics and computer science | 1 | 144 | 4 |
| М.1.2.3 | Optimization of nonlinear functions | 3 | 144 | 4 |
| М.1.2.4 | Mathematical modeling of nonlinear dynamics of distributed systems | 3 | 72 | 2 |
| М.1.2.5 | Fundamentals of entrepreneurship | 3 | 72 | 2 |
| М.1.3.1.1 | Programming in the MathCad environment | 1 | 180 | 5 |
| М.1.3.1.2 | Data processing in MathCad environment | /1 | /180 | /2 |
| М.1.3.2.1 | Mathematical models in mechanics | 3 | 72 | 2 |
| М.1.3.2.2 | Mathematical models in physics | /3 | /72 | /2 |
|  | **Total** |  | **2484** | **69** |