Head of the Department of curricula development and strategic planning
Viktoria Melnikova


| Name | Form of assessment | | | | | | Credits | Total academic hours | | | | | Year 1 | | Year 2 | | Assigned department | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | Semester 1 | Semester 2 | Semester 3 | Semester 4 | | |
| | Examination | Pass/ fail test | Pass/ fail exam with a grade | Term project | Course work | Calculation and graphic work | Fact | As sheduled | Work with a teacher | Class-room | Self-study | Cotrol | Credits | Credits | Credits | Credits | Code | Name |
| **Unit 1.Disciplines (modules)** | | | | | | | 84 | 3024 | 1190.2 | 1018 | 1530.05 | 303.75 | 24 | 29 | 21 | 10 | | |
| **Core part** | | | | | | | 61 | 2196 | 895.15 | 778 | 1098.35 | 202.5 | 20 | 20 | 11 | 10 | | |
| **Socio-humanitarian module** | | **114** | | | | | **10** | **360** | **154.7** | **130** | **171.55** | **33.75** | 7 | | | 3 | | |
| Methodology of scientific research | | 1 | | | | | 2 | 72 | 32.15 | 30 | 39.85 | | 2 | | | | 12 | Department of Control systems and computer engineering |
| Foreign language for business communication | | 1 | | | | | 2 | 72 | 32.15 | 30 | 39.85 | | 2 | | | | 45 | Department Foreign languages |
| Self-management and strong leadership | 1 | | | | | | 3 | 108 | 48.25 | 30 | 26 | 33.75 | 3 | | | | 52 | Department of Management |
| Legal regulation of IT-sphere | | 4 | | | | | 3 | 108 | 42.15 | 40 | 65.85 | | | | | 3 | 12 | Department of Control systems and computer engineering |
| **Mathematical module** | **123** | **23** | | | | **3** | **21** | **756** | **324.05** | **300** | **330.7** | **101.25** | 5 | 8 | 8 | | | |
| Graph theory | 1 | | | | | | 5 | 180 | 66.25 | 60 | 80 | 33.75 | 5 | | | | 13 | Department of Applied mathematics and information technologies |
| Game theory and optimization methods | 2 | | | | | | 5 | 180 | 66.25 | 60 | 80 | 33.75 | | 5 | | | 13 | Department of Applied mathematics and information technologies |
| Computational complexity theory | | 3 | | | | | 3 | 108 | 62.15 | 60 | 45.85 | | | | 3 | | 12 | Department of Control systems and computer engineering |
| Applied statistics and data analysis | 3 | 2 | | | | 3 | 8 | 288 | 129.4 | 120 | 124.85 | 33.75 | | 3 | 5 | | 13 | Department of Applied mathematics and information technologies |
| **Module "Knowledge-intensive information technologies"** | **2** | **1** | | | | **2** | **8** | **288** | **127.4** | **106** | **126.85** | **33.75** | 3 | 5 | | | | |
| Information technologies in research activities | | 1 | | | | | 3 | 108 | 60.15 | 46 | 47.85 | | 3 | | | | 13 | Department of Applied mathematics and information technologies |
| Design and development of knowledge-intensive software | 2 | | | | | 2 | 5 | 180 | 67.25 | 60 | 79 | 33.75 | | 5 | | | 13 | Department of Applied mathematics and information technologies |
| **General professional module** | **1** | **22344** | | | **14** | | **22** | **792** | **289** | **242** | **469.25** | **33.75** | 5 | 7 | 3 | 7 | | |
| ETL systems and databases | 1 | | | | 1 | | 5 | 180 | 65.25 | 46 | 81 | 33.75 | 5 | | | | 13 | Department of Applied mathematics and information technologies |
| Workshop on programming and algorithmization | | 2 | | | | | 4 | 144 | 64.15 | 60 | 79.85 | | | 4 | | | 12 | Department of Control systems and computer engineering |
| Project management in the field of artificial intelligence | | 2 | | | | | 3 | 108 | 48.15 | 46 | 59.85 | | | 3 | | | 13 | Department of Applied mathematics and information technologies |
| Technology entrepreneurship | | 34 | | | 4 | | 7 | 252 | 71.3 | 60 | 180.7 | | | | 3 | 4 | 13 | Department of Applied mathematics and information technologies |
| Management of software development and adaptation | | 4 | | | | | 3 | 108 | 40.15 | 30 | 67.85 | | | | | 3 | 13 | Department of Applied mathematics and information technologies |
| **Part formed by the educational process participants** | | | | | | | 23 | 828 | 295.05 | 240 | 431.7 | 101.25 | 4 | 9 | 10 | | | |
| Data mining technologies | | 1 | | | | | 4 | 144 | 62.15 | 60 | 81.85 | | 4 | | | | 13 | Department of Applied mathematics and information technologies |
| Parallel and distributed computing | 2 | | | | | | 5 | 180 | 66.25 | 60 | 80 | 33.75 | | 5 | | | 12 | Department of Control systems and computer engineering |
| **Elective Disciplines** | | | | | | | | | | | | | | | | | | |
| Heuristic algorithms and artificial neural networks | 3 | | | | | | 5 | 180 | 64.25 | 60 | 82 | 33.75 | | | 5 | | 13 | Department of Applied mathematics and information technologies |
| Search algorithms | 3 | | | | | | 5 | 180 | 64.25 | 60 | 82 | 33.75 | | | 5 | | 12 | Department of Control systems and computer engineering |
| **Elective Disciplines** | | | | | | | | | | | | | | | | | | |
| Design and development of data mining systems (project workshop) | 3 | | 2 | 23 | | | 9 | 324 | 102.4 | 60 | 187.85 | 33.75 | | 4 | 5 | | 13 | Department of Applied mathematics and information technologies |
| Design and development of intelligent decision support systems (project workshop) | 3 | | 2 | 23 | | | 9 | 324 | 102.4 | 60 | 187.85 | 33.75 | | 4 | 5 | | 13 | Department of Applied mathematics and information technologies |
| **Unit 2. Practical training** | | | | | | | 27 | 972 | 972 | | | | 3 | 6 | 3 | 15 | | |
| **Core part** | | | | | | | 27 | 972 | 972 | | | | 3 | 6 | 3 | 15 | | |
| **Academic training** | | | **1** | | | | **3** | **108** | **108** | | | | 3 | | | | | |
| Technological practice | | | 1 | | | | 3 | 108 | 108 | | | | 3 | | | | 13 | Department of Applied mathematics and information technologies |
| **On-the-job training** | | | **2344** | | | | **24** | **864** | **864** | | | | | 6 | 3 | 15 | | |
| Technological practice | | | 2 | | | | 6 | 216 | 216 | | | | | 6 | | | 13 | Department of Applied mathematics and information technologies |
| Scientific research work | | | 34 | | | | 9 | 324 | 324 | | | | | | 3 | 6 | 13 | Department of Applied mathematics and information technologies |
| Pregraduation practice | | | 4 | | | | 9 | 324 | 324 | | | | | | | 9 | 13 | Department of Applied mathematics and information technologies |
| **Unit 3.State final examination** | | | | | | | 9 | 324 | | | | 324 | | | | 9 | | |
| Execution and defense of the final qualification work | | | | | | | 9 | 324 | | | | 324 | | | | 9 | 13 | Department of Applied mathematics and information technologies |
| **Elective courses** | | | | | | | 19 | 684 | 287,15 | 210 | 363,1 | | 4 | 2 | 6 | 2 | | |
| Professional foreign language | | 234 | | | | | 6 | 216 | 96.45 | 90 | 119.55 | 33,75 | | 2 | 2 | 2 | 45 | Department Foreign languages |
| Bridging program of higher mathematics | | 1 | | | | | 2 | 72 | 32.15 | 30 | 39.85 | | 2 | | | | 13 | Department of Applied mathematics and information technologies |
| Bridging program of IT | | 1 | | | | | 2 | 72 | 32.15 | 30 | 39.85 | | 2 | | | | 13 | Department of Applied mathematics and information technologies |
| Cloud technologies | | 3 | | | | | 4 | 144 | 62.15 | 60 | 81.85 | | | | 4 | | 13 | Department of Applied mathematics and information technologies |
| Dialogue systems and speech technologies | 3 | | | | | | 5 | 180 | 64.25 | 60 | 82 | 33.75 | | | 5 | | 13 | Department of Applied mathematics and information technologies |