

Master study programme "Computer Systems" 90 ECTS, part time intramural/ distance learning studies, duration - 2 years

| Study Course | Name of the responsible academic staff member | Block | ECTS | Planning | | | |
|---|---|-------|-----------|-----------|-----------|-----------|-----------|
| | | | | 1st year | | 2nd year | |
| | | | | Semester | | | |
| | | | | 1 | 2 | 3 | 4 |
| Study courses, providing the in-depth understanding of the latest achievements in the industry's theory and practice | | | | | | | |
| Compulsory study courses | | | | | | | |
| Machine Learning Algorithms | A.Bondarenko | A | 6 | 6 | | | |
| NoSQL Database Technologies | J.Čaiko | A | 6 | 6 | | | |
| Latvian for Foreigners/ Business English | S.Plota/ T.Lapaine | A | 3 | 3 | | | |
| Elective study courses | | | | | | | |
| Big Data Architectures | J.Čaiko | B | 6 | | | | |
| Data Warehouses | A.Bondarenko | B | 6 | | | | |
| Cloud computing | J.Čaiko | B | 3 | | | | |
| Blockchain Technology | V.Gopejenko | B | 3 | | | | |
| Introduction to Quantum Computing | J.R.Kalniņš | B | 3 | | | | |
| Study courses on research work, innovation work, project work and management | | | | | | | |
| Compulsory study courses | | | | | | | |
| Computer Experiments and Modelling Technologies | V.Gopejenko | A | 6 | | 6 | | |
| Philosophy of Science Development and Approaches to Research | O.Pozdņakova | A | 3 | | 3 | | |
| Professional specialization study courses | | | | | | | |
| Information Security Management | | | | | | | |
| Computer Security Principles and Technologies | A.Berežņojs | C1 | 3 | | | | |
| WEB Application Security Fundamentals | A.Berežņojs | C1 | 3 | | | | |
| Security of Computer Networks | A.Berežņojs | C1 | 3 | | | | |
| Secure Development and DevSecOps | A.Berežņojs | C1 | 3 | | | | |
| Data Engineering | | | | | | | |
| Databases and SQL | J.Čaiko | C2 | 3 | | | | |
| Business Intelligence | V.Gopejenko | C2 | 3 | | | | |
| Data Engineering | A.Bondarenko | C2 | 3 | | | | |
| Scalable and Reliable Systems Design | R.Djakons | C2 | 3 | | | | |
| Machine Learning Engineering | | | | | | | |
| Data Analysis | V.Gopejenko | C3 | 3 | | | | |
| Natural Language Processing using Deep Learning | A.Bondarenko | C3 | 3 | | | | |
| Image Analysis Using Deep Learning | R.Djakons | C3 | 3 | | | | |
| Advanced Topics in Deep Learning | A.Bondarenko | C3 | 3 | | | | |
| Elective study courses (Without Specialization) | | | | | | | |
| Project Quality Management | A.Mrochko | C0 | 6 | | | | |
| High-level analytics and knowledge technologies | V.Gopejenko | C0 | 6 | | | | |
| Software Risk Analysis | A.Mrochko | C0 | 6 | | | | |
| Business Management* | V.Riashchenko | * | 9 | | | | |
| Environment, Labour and Civil Protection* | V.Djakona | * | 3 | | | | |
| Qualification traineeship | V.Gopejenko | T | 9 | | | 9 | |
| Master's thesis | | M | 30 | | | 6 | 24 |
| Total: | | | 90 | 24 | 21 | 21 | 24 |

*if this study course has not been mastered at previous levels