



National Research University Higher School of Economics (HSE)

Curriculum

Field of study 01.04.02 Applied Mathematics and Informatics

Educational Programme "Master of Data Science"

Trajectories: "Master of Data Science"

Implementing unit: Faculty of Computer Science, HSE - Moscow

1 st, 2024/2025 academic year

APPROVED

27.05.2024

Vice Rector

ROSHCHIN S.Y.

Signed with EDS

Length of Programme: 2 years

Years of Study: 2024/2025 - 2025/2026

Mode of Study: Full Time

Degree: Master's degree / MBA

| Block Code | Course | Subject type | Department | Credits | Total Academic Hours | Contact Hours | Allocation of Contact Hours | | | | Additional Information |
|---|--|--------------|--|--------------|----------------------|---------------|-----------------------------|-----------|------------|------------|------------------------|
| | | | | | | | 1 | 2 | 3 | 4 | |
| Degree Programme | | | | 60,00 | 2 280 | 346 | 62 | 62 | 110 | 112 | |
| Master of Data Science (Applied track) | | | | 60,00 | 2 280 | 346 | 62 | 62 | 110 | 112 | |
| Major | | | | 30,00 | 1 140 | 242 | 48 | 48 | 96 | 50 | |
| 1 | Python Basic | C | Department of Big Data and Information Retrieval | 3,00 | 114 | 24 | 24A | | | | Foreign language |
| 2 | Python Advanced | C | Department of Big Data and Information Retrieval | 3,00 | 114 | 24 | | 24A | | | Foreign language |
| 3 | SQL | C | Department of Big Data and Information Retrieval | 3,00 | 114 | 24 | | | | 24A | Foreign language |
| 4 | Algorithms and Data Structures | C | Department of Big Data and Information Retrieval | 6,00 | 228 | 50 | | | 48 | 2A | Foreign language |
| 5 | Discrete Mathematics | C | Department of Big Data and Information Retrieval | 3,00 | 114 | 24 | 24A | | | | Foreign language |
| 6 | Linear Algebra | C | Department of Big Data and Information Retrieval | 3,00 | 114 | 24 | | | 24A | | Foreign language |
| 7 | Calculus | C | Department of Big Data and Information Retrieval | 3,00 | 114 | 24 | | 24A | | | Foreign language |
| 8 | Basic Statistics | C | Department of Big Data and Information Retrieval | 3,00 | 114 | 24 | | | | 24A | Foreign language |
| 9 | Probability Theory | C | Department of Big Data and Information Retrieval | 3,00 | 114 | 24 | | | 24A | | Foreign language |
| Key Seminars | | | | 18,00 | 684 | 56 | 14 | 14 | 14 | 14 | |
| 1 | Research Seminar "Introduction to Specialty" | C | Department of Big Data and Information Retrieval | 12,00 | 456 | 48 | 12 | 12A | 12 | 12A | Foreign language |
| 2 | Mentor's Seminar | C | Department of Big Data and Information Retrieval | 6,00 | 228 | 8 | 2 | 2A | 2 | 2A | Foreign language |
| Internship | | | | 12,00 | 456 | 48 | | | | 48 | |
| Project Internship | | | | 12,00 | 456 | 48 | | | | 48 | |

| | | | | | | | | | | | |
|---|---------------|---|--|-------|-----|----|--|--|--|-----|------------------|
| 1 | Data Scraping | C | | 12,00 | 456 | 48 | | | | 48A | Foreign language |
|---|---------------|---|--|-------|-----|----|--|--|--|-----|------------------|

Curriculum agreed:

| | | |
|--|-----------------|------------|
| Academic Supervisor | Burova M.B. | 21.05.2024 |
| Dean | ARZHANTSEV I.V. | 22.05.2024 |
| Head of Centre for Educational Model Design | LEPESHKIN I.A. | 22.05.2024 |

* Subject type:

Compulsory course
Elective course

C
E