



National Research University Higher School of Economics (HSE)

Basic 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

APPROVED

15.04.2025

Vice Rector

ROSHCHIN S.Y.

Signed with EDS

Years of Study: 2025/2026 - 2026/2027

Length of Programme: 2 years

Mode of Study: Full Time

Degree: Master's degree / MBA

Block Code	Course	Subject type	Credits	Credits by Years		Planned Educational Programme Development Results
				1	2	
	Degree Programme		120,00	60,00	60,00	
	Master of Data Science (Applied track)		120,00	60,00	60,00	
	Key Seminars		30,00	15,00	15,00	
1	Research Seminar "Artificial Intelligence in Business"	C	6,00		6,00	GPC-1.AMI, GPC-4.AMI, PC-1, PC-7, UC-1
2	Research Seminar "Product Approach in Data Analytics"	C	9,00	9,00		GPC-1.AMI, GPC-4.AMI, PC-1, PC-11, PC-7, UC-1
3	Mentor's Seminar	C	15,00	6,00	9,00	GPC-3.AMI, PC-1, PC-8, UC-1
	Internship		30,00	12,00	18,00	
	Free					
	Preparation of the Graduate Thesis		18,00		18,00	
1	Preparation of the Final Qualifying Work	C	18,00		18,00	GPC-1.AMI, GPC-2.AMI, GPC-3.AMI, GPC-4.AMI, PC-1, PC-10, PC-11, PC-2, PC-3, PC-4, PC-5, PC-6, PC-7, PC-8, PC-9, UC-1, UC-2, UC-3, UC-4, UC-5, UC-6
	Fixed		12,00	12,00		
1	Exploration Data Analysis Project	C	12,00	12,00		GPC-1.AMI, GPC-4.AMI, PC-11, PC-4, PC-9, UC-1
	Major		42,00	33,00	9,00	
1	Time Series Analysis and Forecasting	C	3,00		3,00	GPC-1.AMI, GPC-2.AMI, GPC-3.AMI, PC-1, PC-10, PC-11, PC-4, PC-9, UC-1

2	Machine Learning 2	C	6,00		6,00	GPC-2.AMI, GPC-3.AMI, GPC-4.AMI, PC-1, PC-10, PC-11, PC-4, PC-9, UC-1
3	Introduction to Python	C	3,00	3,00		GPC-1.AMI, GPC-2.AMI, GPC-3.AMI, PC-1, PC-10, PC-7, UC-1
4	Introduction to Python for Data Science	C	3,00	3,00		GPC-1.AMI, GPC-2.AMI, GPC-3.AMI, PC-1, PC-10, PC-11, PC-3, PC-7, UC-1
5	Data Bases and Data Warehouses	C	6,00	6,00		GPC-1.AMI, GPC-3.AMI, PC-1, PC-10, PC-11, PC-4, PC-9, UC-1
6	Machine Learning	C	6,00	6,00		GPC-2.AMI, GPC-3.AMI, GPC-4.AMI, PC-1, PC-10, PC-11, PC-3, PC-4, PC-9, UC-1
7	Discrete Mathematics	C	3,00	3,00		GPC-1.AMI, GPC-3.AMI, PC-1, PC-11, UC-1
8	Linear Algebra	C	3,00	3,00		GPC-1.AMI, GPC-2.AMI, GPC-3.AMI, PC-1, PC-9, UC-1
9	Calculus	C	3,00	3,00		GPC-1.AMI, GPC-2.AMI, GPC-3.AMI, PC-1, PC-10, PC-11, PC-9, UC-1
10	Probability Theory and Mathematical Statistics	C	6,00	6,00		GPC-1.AMI, GPC-2.AMI, GPC-3.AMI, PC-1, PC-10, PC-11, PC-4, UC-1
	Magolego		15,00		15,00	
1	All-university Pool MAGOLEGO Courses	C	15,00		15,00	GPC-1.AMI, GPC-2.AMI, GPC-3.AMI, GPC-4.AMI, PC-1, PC-10, PC-4, PC-9, UC-1
	Final State Certification (FSC)		3,00		3,00	
1	Final Qualification Paper	C	3,00		3,00	GPC-1.AMI, GPC-2.AMI, GPC-3.AMI, GPC-4.AMI, PC-1, PC-10, PC-11, PC-2, PC-3, PC-4, PC-5, PC-6, PC-7, PC-8, PC-9, UC-1, UC-2, UC-3, UC-4, UC-5, UC-6

Curriculum agreed:

Academic Supervisor	Волощук П.В.	28.02.2025
Dean	ARZHANTSEV I.V.	03.03.2025
Head of Centre for Educational Model Design	LEPESHKIN I.A.	14.04.2025

* Subject type:

Compulsory course

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