



National Research University Higher School of Economics (HSE)

Curriculum

Field of study 01.03.02 Applied Mathematics and Information
Science

Educational Programme "Data Science and Business Analytics"
Implementing unit: Faculty of Computer Science, HSE - Moscow
4 th, 2025/2026 academic year

APPROVED

06.06.2025

Vice Rector
ROSHCHIN S.Y.
Signed with EDS

Length of Programme: 4 years

Years of Study: 2022/2023 - 2025/2026

Mode of Study: Full Time

Degree: Bachelor's degree

Block Code	Course	Subject type	Department	Period of execution	Credits	Total Academic Hours	Contact Hours	Allocation of Contact Hours				Additional Information
								1	2	3	4	
	Degree Programme				60,00	2 280	458	128	154	210	14	
	Major				42,00	1 596	432	126	154	200		
	Core Professional Block (Major)				6,00	228	68		28	40		
1	Statistical Methods for Market Research	C	Department of Big Data and Information Retrieval		6,00	228	68		28	40A		Foreign language
	Elective Professional Block (Major)				36,00	1 368	364	126	126	160		
	Elective Professional Block (Major)				9,00	342	96	28	28	40		
1	Strategy	C	Department of Big Data and Information Retrieval		9,00	342	96	28A	28	40A		Foreign language
	Elective Courses (Block 1)				9,00	342	96	28	28	40		
1	Core Management Concepts	E	Department of Big Data and Information Retrieval		9,00	342	96	28	28A	40A		Foreign language
2	Asset Pricing and Financial Markets	E	Department of Big Data and Information Retrieval		9,00	342	96	28	28A	40A		Foreign language
	Elective Courses (Block 2)				10,00	380	112	56	56			
1	Introduction to the Study of Language for Computer Scientists	E	Department of Big Data and Information Retrieval		5,00	190	56	28	28A			Foreign language
2	Generative Models in Machine Learning	E	Department of Big Data and Information Retrieval		5,00	190	56	28	28A			Foreign language
3	Quantitative Finance	E	Department of Big Data and Information Retrieval		5,00	190	56	28	28A			Foreign language
4	Natural Language Processing	E	Department of Big Data and Information Retrieval		5,00	190	56	28	28A			Foreign language
5	Information Security Risk Management	E	Department of Big Data and Information Retrieval		5,00	190	56	28	28A			Foreign language
	Elective Courses (Block 3)				4,00	152	60			60		
1	Information Systems	E	Department of Big Data and Information Retrieval		4,00	152	60			60A		Online Course, Foreign language
2	Computer Vision	E	Department of Big Data and Information Retrieval		4,00	152	40			40A		Foreign language
	-				4,00	152		14	14	20		

1	Research Seminar "Data Analysis in the Natural Sciences"	E	Department of Big Data and Information Retrieval		4,00	152	48	14	14	20A		Foreign language
2	Research Seminar "Data Science in Financial Markets"	E	Department of Big Data and Information Retrieval		4,00	152	48	14	14	20A		Foreign language
3	Research Seminar "Data analysis in complex systems"	E	Department of Data Analysis and Artificial Intelligence		4,00	152	48	14	14	20A		Foreign language
Final State Certification (FSC)					3,00	114	2				2	
Thesis Work					3,00	114	2				2	
1	Presenting of Graduation Thesis	C			3,00	114	2				2A	Foreign language
Internship					15,00	570	24	2		10	12	
Research Internship					15,00	570	22			10	12	
1	Preparation of Graduation Thesis	C			9,00	342	20			10	10A	Foreign language
2	Graduation Internship	C		F	6,00	228	2				2A	Foreign language
Professional Internship							2	2				
1	Work Experience Internship	C		F			2	2A				Foreign language

Curriculum agreed:

Academic Supervisor	Вознесенская Т.В.	26.05.2025
Dean	ARZHANTSEV I.V.	27.05.2025
Head of Centre for Educational Model Design	LEPESHKIN I.A.	06.06.2025

* Subject type:

Compulsory course

C

Elective course

E

Period of execution:

Fixed

F