



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"

Specializations: "Data Analysis in Natural Sciences", "Data Science in Business", "Data Science in Finance"

Implementing unit: Faculty of Computer Science, HSE - Moscow
2 nd, 2024/2025 academic year

APPROVED

19.06.2024

Vice Rector

ROSHCHIN S.Y.

Signed with EDS

Length of Programme: 4 years

Years of Study: 2023/2024 - 2026/2027

Mode of Study: Full Time

Degree: Bachelor's degree

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	2 442	964	196	212	324	232	
Data Culture						6		2		4	
1	External Examinations on Digital Skills. Entry-level	C	отдел развития цифровых компетенций			2		2A			Foreign language
2	External Examinations on Digital Skills. Intermediate Level	C	отдел развития цифровых компетенций			2				2A	Foreign language
3	Independent Programming Test. Advanced Level	C	отдел развития цифровых компетенций			2				2A	Online Course, Foreign language
Major				41,00	1 558	812	168	182	280	182	
Core Professional Block (Major)				29,00	1 102	620	140	154	200	126	
Core Professional Block (Major)				29,00	1 102	620	140	154	200	126	
1	Algorithms and Data Structures	C	Department of Big Data and Information Retrieval	8,00	304	214	56A	56	60	42A	Foreign language
2	Computer Architecture and Operating Systems	C	Department of Big Data and Information Retrieval	5,00	190	136			80	56A	Foreign language
3	Discrete Mathematics 2	C	Department of Big Data and Information Retrieval	4,00	152	56	28	28A			Foreign language
4	Calculus 2	C	Department of Big Data and Information Retrieval	4,00	152	56	28	28A			Foreign language
5	Probability Theory and Mathematical Statistics	C	Department of Big Data and Information Retrieval	8,00	304	158	28	42	60A	28A	Online Course, Foreign language
Elective Professional Block (Major)				12,00	456	192	28	28	80	56	
Compulsory Courses				12,00	456	192	28	28	80	56	
1	Differential Equations	C	Department of Big Data and Information Retrieval	4,00	152	68			40	28A	Foreign language

2	Introduction to Micro and Macroeconomics	C	Department of Big Data and Information Retrieval	8,00	304	124	28	28A	40	28A	Foreign language
	Minor			10,00	380						
	Flexible minor			10,00	380	112	28	28	40	16	
1	Minor	E		10,00	380	112	28	28A	40	16A	Foreign language
	General Courses			1,00	200	144	28	28	44	44	
	Core General Courses			1,00	200	144	28	28	44	44	
1	Physical Training	C	Department of Physical Training	1,00	200	144	28	28	44	44A	Foreign language
	Internship			8,00	304	2				2	
	Project Internship			5,00	190	2				2	
1	Programming Project 1	C		5,00	190	2				2A	Foreign language
	Professional Internship			3,00	114						
1	Educational Internship	C		3,00	114						Foreign language

Curriculum agreed:

Academic Supervisor	VOZNESENSKAYA T.V.	23.03.2024
Dean	ARZHANTSEV I.V.	25.03.2024
Head of Centre for Educational Model Design	LEPESHKIN I.A.	19.06.2024

* Subject type:

Compulsory course

C

Elective course

E