



National Research University Higher School of Economics (HSE)

Curriculum

Field of study 01.03.02 Applied Mathematics and Information Science

Educational Programme "Computing and Data Science"

Specializations: "Machine Learning and Applications", "Software Engineering"

Implementing unit: Faculty of Computer Science, HSE - Moscow
2 nd, 2022/2023 academic year

APPROVED

22.06.2022

Vice Rector

ROSHCHIN S.Y.

Signed with EDS

Length of Programme: 4 years

Years of Study: 2021/2022 - 2024/2025

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	2 480	1 059	142	144	260	250	
Data Culture						3			3		
1	Independent Programming Test. Advanced Level	C	Center for Support and Monitoring of Degree Programs			3			3A		
Major				44,00	1 672	604	28	32	148	136	
Core Professional Block (Major)				44,00	1 672	604	28	32	148	136	
Subject Areas				44,00	1 672	604	28	32	148	136	
Algorithms and Data Structures				4,00	152	60	28	32			
1	Algorithms and Data Structures 2	C	Department of Big Data and Information Retrieval	4,00	152	60	28	32A			
Computer Architecture and Operating Systems				8,00	304	120			60	60	
1	Computer Architecture and Operating Systems	C	Department of Big Data and Information Retrieval	8,00	304	120			60	60A	
Linear Algebra and Geometry				11,00	418	140	28	32	44	36	
1	Algebra	C	Department of Big Data and Information Retrieval	5,00	190	60	28	32A			
2	Numerical Methods	C	Department of Big Data and Information Retrieval	6,00	228	80			44	36A	
Mathematical Analysis				10,00	380	144	28	32	44	40	
1	Calculus 2	C	Department of Big Data and Information Retrieval	10,00	380	144	28	32A	44	40A	
Probability Theory and Mathematical Statistics				11,00	418	140	28	32	44	36	
1	Mathematical Statistics	C	Department of Big Data and Information Retrieval	6,00	228	80			44	36A	

2	Probability Theory	C	Department of Big Data and Information Retrieval	5,00	190	60	28	32A			Online Course
	Minor			10,00	380	304	76	76	76	76	
1	Minor	E		10,00	380	304	76	76A	76	76A	
	English										
	Optional Courses										
1	English	O		6,00	228	104	28	32A	44		Foreign language, Credits only to the cumulative rating
	General Courses				200	144	36	36	36	36	
	Core General Courses				200	144	36	36	36	36	
1	Physical Training	C	Department of Physical Training		200	144	36	36	36	36A	
	Internship			6,00	228	4	2			2	
	Project Internship			6,00	228	2				2	
1	Программный проект	C		6,00	228	2				2A	
	Professional Internship					2	2				
1	Educational Internship	C				2	2A				

Curriculum agreed:

Academic Supervisor	PROMYSLOV V.V.	17.06.2022
Dean	ARZHANTSEV I.V.	20.06.2022
Head of Degree Programmes Development Office	MAMONOVA M.A.	21.06.2022

* Subject type:

Compulsory course
Elective course
Optional course

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