



National Research University Higher School of Economics (HSE)

Curriculum
 Field of study 01.03.02 Applied Mathematics and Information Science
 Educational Programme "Applied Mathematics and Information Science"
 Implementing unit: Faculty of Informatics, Mathematics and Computer Sciences, HSE - Nizhny Novgorod
 2 nd, 2022/2023 academic year

APPROVED
 12.05.2022
 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	2 280	893	184	198	251	260	
	Data Culture					3				3	
1	Independent Programming Test. Advanced Level	C	Center for Support and Monitoring of Degree Programs			3				3A	
	Major			43,00	1 634	616	126	136	174	180	
	Core Professional Block (Major)			39,00	1 482	564	112	120	152	180	
	Subject Areas			39,00	1 482	564	112	120	152	180	
	Algorithms and Data Structures			5,00	190	56	28	28			
1	Algorithms and Data Structures	C	Department of Applied Mathematics and Information Science	5,00	190	56	28	28A			
	Computer Architecture and Operating Systems			5,00	190	60				60	
1	Operating Systems	C	Joint Department with MERA Group	5,00	190	60				60A	
	Linear Algebra and Geometry			5,00	190	80			80		
1	Differential equations	C	Department of Fundamental Mathematics	5,00	190	80			80A		Foreign language
	Mathematical Analysis			4,00	152	60	28	32			
1	Calculus 2	C	Department of Applied Mathematics and Information Science	4,00	152	60	28	32A			
	Programming			12,00	456	172	28	28	36	80	
1	Python for Data Extraction and Processing	C	Department of Applied Mathematics and Information Science	4,00	152	40				40A	Online Course

2	Web Technologies and Databases	C	Department of Applied Mathematics and Information Science	8,00	304	132	28A	28	36A	40A	
Probability Theory and Mathematical Statistics				8,00	304	136	28	32	36	40	
1	Probability Theory and Mathematical Statistics	C	Department of Applied Mathematics and Information Science	8,00	304	136	28	32A	36	40A	
Elective Professional Block (Major)				4,00	152	52	14	16	22		
1	Research seminar	C	Department of Applied Mathematics and Information Science	4,00	152	52	14	16	22A		
Minor				10,00	380	126	30	30	33	33	
1	Minor	E		10,00	380	126	30	30A	33	33A	
English											
Optional Courses							28	32	44		
1	English	O		6,00	228	104	28	32	44A		Foreign language, Credits only to the cumulative rating
General Courses				1,00	38	144	28	32	44	40	
Core General Courses				1,00	38	144	28	32	44	40	
1	Physical Training	C	Department of Physical Training	1,00	38	144	28	32A	44	40A	
Internship				6,00	228	4				4	
Project Internship				5,00	190	2				2	
1	Term Paper	C		5,00	190	2				2A	
Professional Internship				1,00	38	2				2	
1	Educational Internship	C		1,00	38	2				2A	

Curriculum agreed:

Academic Supervisor	KOLDANOV P.A.	06.05.2022
Dean	ASEEVA N.V.	06.05.2022
Deputy Director	FOMENKOV D.A.	06.05.2022
Head of Degree Programmes Development Office	MAMONOVA M.A.	11.05.2022

* Subject type:

Compulsory course
Elective course
Optional course

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