



National Research University Higher School of Economics (HSE)

Curriculum
 Field of study 01.03.01 Mathematics
 Educational Programme "Mathematics"
 Implementing unit: Faculty of Informatics, Mathematics and
 Computer Sciences, HSE - Nizhny Novgorod
 4 th, 2024/2025 academic year

APPROVED
 16.04.2024
 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	330	126	128	70	6	
Major				41,00	1 558	290	112	112	66		
Elective Professional Block (Major)				41,00	1 558	290	112	112	66		
1	Computation and optimization for machine learning	C	Department of Fundamental Mathematics	3,00	114	6			6A		Online Course, Foreign language
2	History of Mathematics	C	Department of Fundamental Mathematics	7,00	266	56	28	28A			
3	Computer Topology	C	Department of Fundamental Mathematics	8,00	304	56	28	28A			
4	Basics of the oscillation theory	C	Department of Fundamental Mathematics	3,00	114	56	28	28A			
5	Applied theory of dynamical systems	C	Department of Fundamental Mathematics	6,00	228	20			20A		Foreign language
6	Number Theory	C	Department of Fundamental Mathematics	7,00	266	40			40A		
7	Elements of function approximation theory	C	Department of Fundamental Mathematics	7,00	266	56	28A	28A			
English				1,00	38	2			2		
Optional Courses											
1	Academic writing in English	O		2,00	76	48		28	20A		Foreign language, Credits only to the cumulative rating
Examinations				1,00	38	2			2		
1	Project Proposal	C	Department of Fundamental Mathematics	1,00	38	2			2A		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	
General Courses				4,00	152	30	14	16			

	Optional General Courses			4,00	152	30	14	16			
1	Philosophy	C	Школа философии и культурологии	4,00	152	30	14	16A			Online Course
	Internship			11,00	418	6			2	4	
	Research Internship			3,00	114	4			2	2	
1	Preparation of Graduation Thesis	C		3,00	114	4			2	2	
	Professional Internship			8,00	304	2				2	
1	Graduation Internship	C		8,00	304	2				2A	

Curriculum agreed:

Academic Supervisor	CHEBOCHKO N.G.	07.03.2024
Dean	ASEEVA N.V.	11.03.2024
Deputy Director	FOMENKOV D.A.	12.03.2024
Head of Centre for Educational Model Design	LEPESHKIN I.A.	12.04.2024

* Subject type:

Compulsory course
 Elective course
 Optional course

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