

## National Research University Higher School of Economics (HSE)

## Curriculum

Field of study 01.04.01 Mathematics Educational Programme "Mathematics"

Trajectories: "Mathematics"

Implementing unit: Faculty of Informatics, Mathematics and Computer Sciences, HSE - Nizhny Novgorod

1 st, 2023/2024 academic year

APPROVED 12.05.2023 Vice Rector

ROSHCHIN S.Y. Signed with EDS

Length of Programme: 2 years

Years of Study: 2023/2024 - 2024/2025

Mode of Study: Full Time

Degree: Master's degree / MBA

	Course	Subject Departm			Total Academic Hours	Contact Hours	А	llocation of (	Contact Hour		
Block Code			Department	Credits			1	2	3	4	Additional Information
	Degree Programme			60,00	2 280	550	90	90	207	169	
	Mathematics (General track)			60,00	2 280	550	90	90	207	169	
	Major			39,00	1 482	442	84	84	157	123	
1	Analysis of nonlinear dynamical systems	С	Department of Fundamental Mathematics	6,00	228	56	28	28A			Foreign language
2	Introduction to One-parameter Semigroups of Operators with Background from Real and Functional Analysis	С	Department of Fundamental Mathematics	9,00	342	78	28A	28	22A		Foreign language
3	Introduction to Numerical Analysis	E	Department of Fundamental Mathematics	6,00	228	6			2	4A	Online Course, Foreign language
4	Mathematics of Science	С	Department of Fundamental Mathematics	6,00	228	84			44	40A	Online Course, Foreign language
5	Modern theory of dynamical systems	С	Department of Fundamental Mathematics	6,00	228	56	28	28A			Foreign language
6	Elements of the theory of solitons	E	Department of Fundamental Mathematics	6,00	228	84			44	40A	Foreign language
7	Ergodic theory	С	Department of Fundamental Mathematics	6,00	228	84			44	40A	Foreign language
	Key Seminars			9,00	342	92	2	2	46	42	
1	Research Seminar " Theory of Bifurcations of Multidimensional Systems"	С	Department of Fundamental Mathematics	6,00	228	84			44	40A	Foreign language
2	Mentor's Seminar	С	Department of Fundamental Mathematics	3,00	114	8	2	2	2	2A	Foreign language
	Magolego			6,00	228						

1	All-university Pool MAGOLEGO Courses	С		6,00	228						Foreign language
	Internship			6,00	228	16	4	4	4	4	
	Research Internship			4,00	152	8	2	2	2	2	
1	Term Paper	С		4,00	152	8	2	2	2	2A	Foreign language
	Project Internship			2,00	76	8	2	2	2	2	
1	Project on pedagogy	С		2,00	76	8	2	2	2	2A	Foreign language

## Curriculum agreed:

Academic Supervisor POCHINKA O.V. 24.03.2023

Dean ASEEVA N.V. 24.03.2023

Deputy Director FOMENKOV D.A. 24.03.2023

Head of Centre for

Educational Model Design LEPESHKIN I.A. 04.05.2023

\* Subject type:

Compulsory course C Elective course E