National Research University Higher School of Economics (HSE)

Curriculum
Field of study 01.03.04 Applied Mathematics
Educational Programme "Applied Mathematics"
Specializations: "Applied methods of stochastic analysis",
"Mathematical and computer methods for modern technologies",
"Mathematical modelling, control and information processing"
Implementing unit: Tikhonov Moscow Institute of Electronics and
Mathematics, HSE - Moscow
2 nd, 2022/2023 academic year

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 Progamme			**60,00**	**1 900**	**1 092**	**212**	**268**	**306**	**306**	
	Major			**39,00**	**1 482**	**694**	**130**	**162**	**202**	**200**	
	Core Professional Block (Major)			**37,00**	**1 406**	**686**	**124**	**162**	**202**	**198**	
	Subject Areas			**37,00**	**1 406**	**686**	**124**	**162**	**202**	**198**	
	Natural Sciences and Engineering			**8,00**	**304**	**152**	**36**	**36**	**40**	**40**	
1	Theoretical Mechanics	C	Department of Applied Mathematics	4,00	152	80			40A	40A	
2	Physics	C	School of Electronic Engineering	4,00	152	72	36	36A			
	Real, Complex and Functional Analysis			**13,00**	**494**	**230**	**28**	**32**	**84**	**86**	
1	Calculus	C	Department of Applied Mathematics	5,00	190	60	28	32A			
2	Theory of Complex Functions	C	Department of Applied Mathematics	4,00	152	90			44	46A	
3	Functional Analysis	C	Department of Applied Mathematics	4,00	152	80			40	40A	
	Differential Equations			**4,00**	**152**	**74**	**38**	**36**			
1	Differential Equations	C	Department of Applied Mathematics	4,00	152	74	38A	36A			
	Programming			**6,00**	**228**	**110**	**22**	**24**	**32**	**32**	
1	Algorithmization and Programming	C	Department of Applied Mathematics	6,00	228	110	22A	24	32	32A	Online Course
	Probability Theory and Mathematical Statistics			**6,00**	**228**	**120**		**34**	**46**	**40**	
1	Probability Theory and Mathematical Statistics	C	Department of Applied Mathematics	6,00	228	120		34	46A	40A	

#	Course	Type	Department								Notes
	Elective Professional Block (Major)			2,00	76	8	6			2	
	Научно-исследовательский/Проектный семинар			2,00	76	8	6			2	
1	International Research and Development Projects	C	Department of Applied Mathematics	2,00	76	8	6			2A	Foreign language
	Minor			10,00		152	38	38	38	38	
1	Minor	C		10,00		152	38	38A	38	38A	
	English										
	Optional Courses										
1	English	O		6,00	228	104	28	32A	44		Foreign language, Credits only to the cumulative rating
	General Courses			1,00	38	144	36	36	36	36	
	Core General Courses			1,00	38	144	36	36	36	36	
1	Physical Training	C	Department of Physical Training	1,00	38	144	36	36	36	36A	
	Internship			10,00	380	102	8	32	30	32	
	Project Internship			10,00	380	102	8	32	30	32	
1	Исследовательский или прикладной проект	C		3,00	114	2				2A	
2	Computer Practicum 2	C	Department of Applied Mathematics	3,00	114	64		24A	20	20A	Online Course
3	Computer Practicum in Mathematics-I	C	Department of Applied Mathematics	4,00	152	36	8	8A	10	10A	

Curriculum agreed:

Academic Supervisor   MANITA L.A.   15.04.2022

Dean   KROUK E.A.   16.04.2022

Head of Degree Programmes
Development Office   MAMONOVA M.A.   19.04.2022

* Subject type:
Compulsory course   C
Elective course   E
Optional course   O