



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: St. Petersburg School of Mathematics, Physics and Computer Science, HSE, HSE - Saint Petersburg
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	1 153	270	238	348	297	
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	814	200	166	248	200	
Core Professional Block (Major)				42,00	1 596	810	200	166	248	196	
Subject Areas				42,00	1 596	810	200	166	248	196	
Algorithms and Data Structures				3,00	114	66	42	24			
1	Algorithms and Data Structures	C	Informatics Department	3,00	114	66	42	24A			
Computer Architecture and Operating Systems				9,00	342	168		48	68	52	
1	Computer Architecture and Operating Systems	C	Joint Department with Yandex	9,00	342	168		48	68A	52A	
Discrete Mathematics				7,00	266	166	70	24	40	32	
1	Discrete Mathematics	C	Informatics Department	4,00	152	124	28	24A	40	32A	
2	Formal Languages	C	Informatics Department	3,00	114	42	42A				
Optimization Methods				5,00	190	98	50	48			
1	Calculus 2	C	Informatics Department	5,00	190	98	50	48A			
Programming				8,00	304	168	38	22	60	48	
1	Functional Programming	C	Informatics Department	3,00	114	60	38	22A			Online Course
2	Java programming language	C	Informatics Department	5,00	190	108			60A	48A	Online Course
Probability Theory and Mathematical Statistics				10,00	380	144			80	64	
1	Probability Theory and Mathematical Statistics	C	Informatics Department	10,00	380	144			80	64A	Online Course
Elective Professional Block (Major)				1,00	38	4				4	

	Проектный семинар			1,00	38	4				4	
1	Project Seminar	C	Informatics Department	1,00	38	4				4A	
	Minor			10,00	380	120	28	32	32	28	
1	Minor	E		10,00	380	120	28	32A	32	28A	
	English										
	Optional Courses										
1	English	O		6,00		104	28	32A	44		Credits only to the cumulative rating
	General Courses			4,00	152	214	42	40	68	64	
	Optional General Courses			4,00	152	30			16	14	
1	Psychology	C	Department of Psychology	4,00	152	30			16	14A	Online Course
	Core General Courses					184	42	40	52	50	
1	Physical Training	C	Department of Physical Training			184	42	40A	52	50A	Online Course
	Internship			3,00	114	2				2	
	Project Internship			3,00	114	2				2	
1	Project	C		3,00	114	2				2A	

Curriculum agreed:

Academic Supervisor	OMELCHENKO A.V.	05.05.2022
Dean	OMELCHENKO A.V.	05.05.2022
Deputy Director	KUZMIN P.V.	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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