



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, 2023/2024 academic year

APPROVED

28.04.2023

Vice Rector

ROSHCHIN S.Y.

Signed with EDS

Length of Programme: 4 years

Years of Study: 2022/2023 - 2025/2026

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	2 442	1 142	322	242	304	270	
Data Culture						6				2	
1	External Examinations on Digital Skills. Entry-level	C	отдел развития цифровых компетенций			2		2A			
2	External Examinations on Digital Skills. Intermediate Level	C	отдел развития цифровых компетенций			2				2A	
3	Independent Programming Test. Advanced Level	C	отдел развития цифровых компетенций			2				2A	Online Course
Major				42,00	1 596	800	236	156	220	188	
Core Professional Block (Major)				41,00	1 558	796	236	156	220	184	
1	Algorithms and Data Structures	C	Informatics Department	3,00	114	66	42	24A			
2	Computer Architecture	C	Joint Department with Yandex	5,00	190	70	34	36A			
3	Discrete Mathematics	C		4,00	152	124	28	24A	40	32A	
4	Calculus 2	C	Informatics Department	5,00	190	98	50	48A			
5	Operating Systems	C	Joint Department with Yandex	6,00	228	80			40	40A	
6	Probability Theory and Mathematical Statistics	C	Informatics Department	8,00	304	144			80	64A	
7	Formal Languages	C	Informatics Department	3,00	114	42	42A				
8	Functional Programming	C	Informatics Department	3,00	114	64	40	24A			Online Course
9	Java programming language	C	Informatics Department	4,00	152	108			60A	48A	
Elective Professional Block (Major)				1,00	38	4				4	
Project Seminar				1,00	38	4				4	
1	Project Seminar	C		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	228	104	28	32	44A		Foreign language, Credits only to the cumulative rating
	General Courses			5,00	352	214	58	54	52	50	
	Optional General Courses			4,00	152	30	16	14			
1	Elective General Course	E		4,00	152	30	16	14A			
	Core General Courses			1,00	200	184	42	40	52	50	
1	Physical Training	C	Department of Physical Training	1,00	200	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. 18.04.2023

Dean 18.04.2023

Deputy Director KUZMIN P.V. 18.04.2023

Head of Centre for Educational Model Design LEPESHKIN I.A. 28.04.2023

* Subject type:

Compulsory course

C

Elective course

E

Optional course

O