



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, 2024/2025 academic year

APPROVED

27.05.2024

Vice Rector

ROSHCHIN S.Y.

Signed with EDS

Length of Programme: 4 years

Years of Study: 2023/2024 - 2026/2027

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	320	246	304	272	
Data Culture						6		2		4	
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				41,00	1 558	800	236	156	220	188	
Core Professional Block (Major)				40,00	1 520	796	236	156	220	184	
1	Algorithms and Data Structures	C	Informatics Department	2,00	76	66	42	24A			
2	Computer Architecture	C	Joint Department with Yandex	5,00	190	70	34	36A			
3	Discrete Mathematics	C	Informatics Department	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	
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	228	100	32	28	40A		Foreign language, Credits only to the cumulative rating
	General Courses			4,00	314	214	56	56	52	50	
	Optional General Courses			3,00	114	30	14	16			
1	Economics	C	Department of Theoretical Economics	3,00	114	30	14	16A			Online Course
	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			5,00	190	2				2	
	Project Internship			5,00	190	2				2	
1	Project	C		5,00	190	2				2A	

Curriculum agreed:

Academic Supervisor	OMELCHENKO A.V.	13.05.2024
Dean		13.05.2024
Deputy Director	KUZMIN P.V.	13.05.2024
Head of Centre for Educational Model Design	LEPESHKIN I.A.	22.05.2024

* Subject type:

Compulsory course

C

Elective course

E

Optional course

O