



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

## Curriculum

Field of study 01.03.02 Applied Mathematics and Information Science

Educational Programme "Applied Data Analysis and Artificial Intelligence"

Specializations: "Applied Data Analysis", "Data Analysis in Finance", "Machine Learning Architecture"

Implementing unit: St. Petersburg School of Mathematics, Physics and Computer Science, HSE, HSE - Saint Petersburg

1 st, 2023/2024 academic year

APPROVED

17.05.2023

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	
<b>Degree Programme</b>				<b>60,00</b>	<b>2 480</b>	<b>994</b>	<b>284</b>	<b>196</b>	<b>280</b>	<b>236</b>	
<b>Data Culture</b>									<b>2</b>		
1	Independent Digital Literacy Test	C	отдел развития цифровых компетенций			2			2A		Online Course
<b>Major</b>				<b>45,00</b>	<b>1 710</b>	<b>676</b>	<b>182</b>	<b>156</b>	<b>190</b>	<b>148</b>	
<b>Core Professional Block (Major)</b>				<b>38,00</b>	<b>1 444</b>	<b>620</b>	<b>154</b>	<b>132</b>	<b>190</b>	<b>144</b>	
1	Algebra	C	Informatics Department	4,00	152	52	28	24A			
2	Algorithms and Data Structures	C	Informatics Department	8,00	304	124	28	24A	40	32A	
3	Discrete Mathematics	C	Informatics Department	8,00	304	124	28A	24A	40	32A	
4	Linear Algebra and Geometry	C	Informatics Department	4,00	152	72			40	32A	
5	Calculus 1	C	Informatics Department	10,00	380	196	42	36A	70	48A	
6	Introduction to Programming	C	Informatics Department	4,00	152	52	28	24A			
<b>Elective Professional Block (Major)</b>				<b>7,00</b>	<b>266</b>	<b>56</b>	<b>28</b>	<b>24</b>		<b>4</b>	
<b>Compulsory Courses</b>				<b>7,00</b>	<b>266</b>	<b>56</b>	<b>28</b>	<b>24</b>		<b>4</b>	
1	Project Seminar	C	Informatics Department	3,00	114	4				4A	
2	C++ Programming Language	C	Informatics Department	4,00	152	52	28	24A			
<b>English</b>											
<b>Optional Courses</b>											
1	English	O		8,00	304	128	20	28A	40	40A	Foreign language, Credits only to the cumulative rating
<b>Examinations</b>											
1	English Language Integrative Exam		Department of Foreign Languages			2				2A	

	<b>General Courses</b>			<b>7,00</b>	<b>466</b>	<b>316</b>	<b>102</b>	<b>40</b>	<b>88</b>	<b>86</b>	
	<b>Optional General Courses</b>			<b>6,00</b>	<b>228</b>	<b>126</b>	<b>54</b>		<b>36</b>	<b>36</b>	
1	Russian History	C	School of History	4,00	152	72			36	36A	Online Course
2	Foundations of Russian Statehood	C	School of History	2,00	76	54	54A				
	<b>Core General Courses</b>			<b>1,00</b>	<b>238</b>	<b>190</b>	<b>48</b>	<b>40</b>	<b>52</b>	<b>50</b>	
1	Safe Living Basics	C	отдел развития образовательных программ	1,00	38	6	6A				Online Course
2	Physical Training	C	Department of Physical Training		200	184	42	40A	52	50A	Online Course
	<b>Internship</b>			<b>8,00</b>	<b>304</b>	<b>2</b>				<b>2</b>	
	<b>Project Internship</b>			<b>8,00</b>	<b>304</b>	<b>2</b>				<b>2</b>	
1	Project	C		8,00	304	2				2A	

**Curriculum agreed:**

Academic Supervisor	MUKHIN M.S.	03.05.2023
Dean		03.05.2023
Deputy Director	KUZMIN P.V.	03.05.2023
Head of Centre for Educational Model Design	LEPESHKIN I.A.	17.05.2023

\* Subject type:

Compulsory course

C

Elective course

E

Optional course

O