



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, 2022/2023 academic year

APPROVED  
 24.05.2022  
 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	
<b>Degree Programme</b>				<b>60,00</b>	<b>2 480</b>	<b>933</b>	<b>244</b>	<b>212</b>	<b>259</b>	<b>218</b>	
<b>Data Culture</b>						<b>3</b>			<b>3</b>		
1	Independent Digital Literacy Test	C	Center for Support and Monitoring of Degree Programs			3			3A		
<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>2</b>				<b>2</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>						<b>2</b>				<b>2</b>	
1	English Language Integrative Exam	C	Department of Foreign Languages			2				2A	

	<b>General Courses</b>			<b>9,00</b>	<b>542</b>	<b>250</b>	<b>62</b>	<b>56</b>	<b>66</b>	<b>66</b>	
	<b>Optional General Courses</b>			<b>8,00</b>	<b>304</b>	<b>60</b>	<b>14</b>	<b>16</b>	<b>14</b>	<b>16</b>	
1	Legal Literacy	C	департамент права цифровых технологий и биоправа	4,00	152	30			20	10A	Online Course
2	Экономика	C	Department of Theoretical Economics	4,00	152	30	14	16A			Online Course
	<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>6,00</b>	<b>228</b>	<b>2</b>				<b>2</b>	
	<b>Project Internship</b>			<b>6,00</b>	<b>228</b>	<b>2</b>				<b>2</b>	
1	Project	C		6,00	228	2				2A	

**Curriculum agreed:**

Academic Supervisor	SHPILMAN A.A.	19.05.2022
Dean		19.05.2022
Deputy Director	KUZMIN P.V.	19.05.2022
Head of Degree Programmes Development Office	LEPESHKIN I.A.	20.05.2022

\* Subject type:

Compulsory course  
 Elective course  
 Optional course

C  
 E  
 O