



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: Faculty of Informatics, Mathematics and Computer Sciences, HSE - Nizhny Novgorod

3 rd, 2023/2024 academic year

APPROVED

28.04.2023

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	
<b>Degree Programme</b>				<b>60,00</b>	<b>2 280</b>	<b>688</b>	<b>136</b>	<b>146</b>	<b>222</b>	<b>184</b>	
<b>Data Culture</b>				<b>1,00</b>	<b>38</b>	<b>2</b>				<b>2</b>	
1	Independent Data Science Test. Advanced Level	C	отдел развития цифровых компетенций	1,00	38	2				2A	Online Course
<b>Major</b>				<b>35,00</b>	<b>1 330</b>	<b>510</b>	<b>98</b>	<b>98</b>	<b>174</b>	<b>140</b>	
<b>Core Professional Block (Major)</b>				<b>6,00</b>	<b>228</b>	<b>64</b>			<b>44</b>	<b>20</b>	
<b>Subject Areas</b>				<b>6,00</b>	<b>228</b>	<b>64</b>			<b>44</b>	<b>20</b>	
<b>Optimization Methods</b>				<b>3,00</b>	<b>114</b>	<b>44</b>			<b>44</b>		
1	Stochastic Methods of Decision Making	C	Department of Applied Mathematics and Information Science	3,00	114	44			44A		
<b>Programming</b>				<b>3,00</b>	<b>114</b>	<b>20</b>				<b>20</b>	
1	Selected Data Analysis Topics	C	Department of Applied Mathematics and Information Science	3,00	114	20				20A	Online Course
<b>Elective Professional Block (Major)</b>				<b>29,00</b>	<b>1 102</b>	<b>446</b>	<b>98</b>	<b>98</b>	<b>130</b>	<b>120</b>	
1	Algorithms of Operations Research	C	Department of Applied Mathematics and Information Science	3,00	114	40				40A	
2	Data Analysis	C	Department of Applied Mathematics and Information Science	6,00	228	100	28A	28	44A		
3	Data Bases	C	Department of Applied Mathematics and Information Science	4,00	152	56	28	28A			

4	Operations Research	C	Department of Applied Mathematics and Information Science	6,00	228	100	28A	28	44A		
5	Research Seminar	C	Department of Applied Mathematics and Information Science	3,00	114	50	14	14	22A		
6	Network and Web Technologies	C	Department of Applied Mathematics and Information Science	4,00	152	60			20	40A	Foreign language
7	Theory and Methods of Translation and Compilation	C	Department of Applied Mathematics and Information Science	3,00	114	40				40A	
<b>Minor</b>				<b>10,00</b>	<b>380</b>	<b>140</b>	<b>28</b>	<b>28</b>	<b>44</b>	<b>40</b>	
1	Minor	E		10,00	380	140	28	28A	44	40A	
<b>English</b>						<b>2</b>			<b>2</b>		
<b>Examinations</b>						<b>2</b>			<b>2</b>		
1	Independent English Exam	C	School of Foreign Languages			2			2A		Foreign language
<b>General Courses</b>				<b>4,00</b>	<b>152</b>	<b>30</b>	<b>10</b>	<b>20</b>			
<b>Optional General Courses</b>				<b>4,00</b>	<b>152</b>	<b>30</b>	<b>10</b>	<b>20</b>			
1	Legal Literacy	C	департамент права цифровых технологий и биоправа	4,00	152	30	10	20A			Online Course
<b>Internship</b>				<b>10,00</b>	<b>380</b>	<b>4</b>			<b>2</b>	<b>2</b>	
<b>Project Internship</b>				<b>7,00</b>	<b>266</b>	<b>4</b>			<b>2</b>	<b>2</b>	
1	Term Paper	C		5,00	190	2				2A	
2	Проект ПМИ	E		2,00	76	2			2A		
<b>Professional Internship</b>				<b>3,00</b>	<b>114</b>						
1	Work Experience Internship	C		3,00	114						

**Curriculum agreed:**

Academic Supervisor	KOLDANOV P.A.	13.04.2023
Dean	ASEEVA N.V.	14.04.2023
Deputy Director	FOMENKOV D.A.	14.04.2023
Head of Centre for Educational Model Design	LEPESHKIN I.A.	28.04.2023

\* Subject type:

Compulsory course

C

Elective course

E

Optional course

O