



National Research University Higher School of Economics (HSE)

Curriculum

Field of study 01.04.02 Applied Mathematics and Informatics

Educational Programme "Data Mining"

Trajectories: "Data Mining"

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

1 st, 2024/2025 academic year

APPROVED

01.04.2024

Vice Rector

ROSHCHIN S.Y.

Signed with EDS

Length of Programme: 2 years

Years of Study: 2024/2025 - 2025/2026

Mode of Study: Full Time

Degree: Master's degree / MBA

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>524</b>	<b>114</b>	<b>142</b>	<b>162</b>	<b>106</b>	
<b>Data Mining (Applied track)</b>				<b>60,00</b>	<b>2 280</b>	<b>524</b>	<b>114</b>	<b>142</b>	<b>162</b>	<b>106</b>	
<b>Major</b>				<b>42,00</b>	<b>1 596</b>	<b>404</b>	<b>112</b>	<b>112</b>	<b>120</b>	<b>60</b>	
1	Discrete optimization and operations research	C	Department of Applied Mathematics and Information Science	6,00	228	56	28	28A			Foreign language
2	Discrete Models and Algorithms Complexity	C	Department of Applied Mathematics and Information Science	6,00	228	56	28	28A			
3	Machine Learning	C	Department of Applied Mathematics and Information Science	6,00	228	56	28	28A			
4	Methods of Data Analysis	C	Department of Applied Mathematics and Information Science	6,00	228	56	28	28A			
5	Optimization Methods	C	Department of Applied Mathematics and Information Science	6,00	228	60			40	20A	
6	Stochastic Models	C	Department of Applied Mathematics and Information Science	6,00	228	60			40	20A	
7	Technologies of work with big data	C	Department of Applied Mathematics and Information Science	6,00	228	60			40	20A	
<b>Key Seminars</b>				<b>7,00</b>	<b>266</b>	<b>118</b>	<b>2</b>	<b>30</b>	<b>42</b>	<b>44</b>	
1	Research Seminar "Methods of Data Mining"	C	Department of Applied Mathematics and Information Science	3,00	114	52			12	40A	

2	Research Seminar "Data Mining Tools"	C	Department of Applied Mathematics and Information Science	3,00	114	56		28	28A	
3	Mentor's Seminar	C	Department of Applied Mathematics and Information Science	1,00	38	10	2	2	2	4A
<b>Magolego</b>				<b>9,00</b>	<b>342</b>					
1	All-university Pool MAGOLEGO Courses	E		9,00	342					
<b>Internship</b>				<b>2,00</b>	<b>76</b>	<b>2</b>				<b>2</b>
<b>Research Internship</b>				<b>2,00</b>	<b>76</b>	<b>2</b>				<b>2</b>
1	Term Paper	C		2,00	76	2				2A

**Curriculum agreed:**

Academic Supervisor	BATSYN M.V.	25.03.2024
Dean	ASEEVA N.V.	25.03.2024
Deputy Director	FOMENKOV D.A.	26.03.2024
Head of Centre for Educational Model Design	LEPESHKIN I.A.	01.04.2024

\* Subject type:

Compulsory course

C

Elective course

E