



National Research University Higher School of Economics (HSE)

Curriculum

Field of study 01.03.02 Applied Mathematics and Information Science

Educational Programme "Bachelor of Sciences (BSc) in Data Science and Business Analytics"

Implementing unit: Faculty of Computer Science, HSE - Moscow  
2 nd, 2021/2022 academic year

APPROVED

03.06.2021

Vice Rector

ROSHCHIN Y.S.

Signed with EDS

Length of Programme: 4 years

Years of Study: 2020/2021 - 2023/2024

Mode of Study: Full Time

Degree: Bachelor's degree

Number of Students: 110

Number of Groups: 4

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</b>	<b>2 280</b>	<b>1 168</b>	<b>236</b>	<b>306</b>	<b>398</b>	<b>244</b>	
	<b>Major</b>			<b>41</b>	<b>1 558</b>	<b>884</b>	<b>172</b>	<b>228</b>	<b>310</b>	<b>190</b>	
	<b>Core Professional Block (Major)</b>			<b>29</b>	<b>1 102</b>	<b>684</b>	<b>142</b>	<b>194</b>	<b>220</b>	<b>144</b>	
	<b>Subject Areas</b>			<b>29</b>	<b>1 102</b>	<b>684</b>	<b>142</b>	<b>194</b>	<b>220</b>	<b>144</b>	
	<b>Algorithms and Data Structures</b>			<b>8</b>	<b>304</b>	<b>246</b>	<b>56</b>	<b>64</b>	<b>66</b>	<b>60</b>	
1	Algorithms and Data Structures	C	Department of Big Data and Information Retrieval	8	304	246	56	64A	66	60A	Online Course, Foreign language
	<b>Computer Architecture and Operating Systems</b>			<b>5</b>	<b>190</b>	<b>144</b>			<b>88</b>	<b>56</b>	
1	Computer Architecture and Operating Systems	C	Department of Big Data and Information Retrieval	5	190	144			88	56A	Foreign language
	<b>Discrete Mathematics</b>			<b>4</b>	<b>152</b>	<b>60</b>	<b>28</b>	<b>32</b>			
1	Discrete Mathematics 2	C	Department of Big Data and Information Retrieval	4	152	60	28	32A			Foreign language
	<b>Mathematical Analysis</b>			<b>4</b>	<b>152</b>	<b>64</b>	<b>30</b>	<b>34</b>			
1	Calculus 2	C	Department of Big Data and Information Retrieval	4	152	64	30	34A			Foreign language
	<b>Probability Theory and Mathematical Statistics</b>			<b>8</b>	<b>304</b>	<b>170</b>	<b>28</b>	<b>64</b>	<b>66</b>	<b>28</b>	
1	Probability Theory and Mathematical Statistics	C	Department of Big Data and Information Retrieval	8	304	170	28A	48	66	28A	Online Course, Foreign language
	<b>Elective Professional Block (Major)</b>			<b>12</b>	<b>456</b>	<b>200</b>	<b>30</b>	<b>34</b>	<b>90</b>	<b>46</b>	
1	Differential Equations	C	Department of Big Data and Information Retrieval	4	152	72			44	28A	Foreign language
2	Introduction to Micro and Macroeconomics	C	Department of Big Data and Information Retrieval	8	304	128	30	34A	46	18A	Foreign language
	<b>Minor</b>			<b>8</b>	<b>304</b>	<b>120</b>	<b>28</b>	<b>32</b>	<b>44</b>	<b>16</b>	

1	Business and Management in Global Context	C	Department of Big Data and Information Retrieval	8	304	120	28	32	44A	16A	Foreign language
<b>General Courses</b>				<b>1</b>	<b>38</b>	<b>144</b>	<b>36</b>	<b>36</b>	<b>36</b>	<b>36</b>	
<b>Core General Courses</b>				<b>1</b>	<b>38</b>	<b>144</b>	<b>36</b>	<b>36</b>	<b>36</b>	<b>36</b>	
1	Physical Training	C	Department of Physical Training	1	38	144	36	36	36	36A	
<b>Internship</b>				<b>10</b>	<b>380</b>	<b>20</b>		<b>10</b>	<b>8</b>	<b>2</b>	
<b>Project Internship</b>				<b>7</b>	<b>266</b>	<b>20</b>		<b>10</b>	<b>8</b>	<b>2</b>	
1	Программный проект	C		7	266	20		10	8	2A	Foreign language
<b>Professional Internship</b>				<b>3</b>	<b>114</b>						
1	Educational Internship	C		3	114						Foreign language

**Curriculum agreed:**

Academic Supervisor	VOZNESENSKAYA T.V.	02.06.2021
Dean	ARZHANTSEV I.V.	02.06.2021
Head of Degree Programmes Development Office	MAMONOVA M.A.	03.06.2021

\* Subject type:

Compulsory course

C