



National Research University Higher School of Economics (HSE)

Curriculum  
 Field of study 04.03.01 Chemistry  
 Educational Programme "Chemistry"  
 Implementing unit: Faculty of Chemistry, HSE - Moscow  
 3 rd, 2022/2023 academic year

APPROVED  
 14.04.2022  
 Vice Rector  
 ROSHCHIN S.Y.  
 Signed with EDS

Length of Programme: 4 years  
 Years of Study: 2020/2021 - 2023/2024  
 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>611</b>	<b>162</b>	<b>166</b>	<b>187</b>	<b>204</b>	
	<b>Major</b>			<b>42,00</b>	<b>1 596</b>	<b>424</b>	<b>116</b>	<b>106</b>	<b>146</b>	<b>164</b>	
	<b>Core Professional Block (Major)</b>			<b>25,00</b>	<b>950</b>	<b>320</b>	<b>48</b>	<b>106</b>	<b>74</b>	<b>92</b>	
	<b>Subject Areas</b>			<b>25,00</b>	<b>950</b>	<b>320</b>	<b>48</b>	<b>106</b>	<b>74</b>	<b>92</b>	
	<b>Analytical Chemistry</b>			<b>8,00</b>	<b>304</b>	<b>92</b>			<b>46</b>	<b>46</b>	
1	Analytical Chemistry	C	Faculty of Chemistry	8,00	304	92			46	46A	
	<b>Quantum Chemistry</b>			<b>4,00</b>	<b>152</b>	<b>56</b>		<b>28</b>	<b>28</b>		
1	Quantum Chemistry	C	Faculty of Chemistry	4,00	152	56		22	34A		
	<b>Organic Chemistry</b>			<b>3,00</b>	<b>114</b>	<b>30</b>		<b>30</b>			
1	Biochemistry	C	Faculty of Chemistry	3,00	114	30		14	16A		Online Course, Foreign language
	<b>Fundamentals of Physical Chemistry</b>			<b>10,00</b>	<b>380</b>	<b>142</b>	<b>48</b>	<b>48</b>		<b>46</b>	
1	Crystal Chemistry	C	Faculty of Chemistry	4,00	152	46				46A	
2	Physical Chemistry	C	Faculty of Chemistry	6,00	228	96	48A	48A			Online Course
	<b>Elective Professional Block (Major)</b>			<b>17,00</b>	<b>646</b>	<b>104</b>	<b>68</b>		<b>72</b>	<b>72</b>	
	<b>Elective Courses</b>			<b>9,00</b>	<b>342</b>		<b>36</b>		<b>36</b>	<b>36</b>	
1	Elective courses	E		9,00	342		36A	36A	36A	36A	
	<b>Compulsory Courses</b>			<b>8,00</b>	<b>304</b>	<b>104</b>	<b>32</b>		<b>36</b>	<b>36</b>	
1	Data Analysis in Python	C	Faculty of Chemistry	4,00	152	32	32A				Online Course, Foreign language
2	Chemistry of Transition Metals	C	Faculty of Chemistry	4,00	152	72			36A	36A	
	<b>Minor</b>			<b>10,00</b>	<b>380</b>	<b>152</b>	<b>38</b>	<b>38</b>	<b>38</b>	<b>38</b>	
1	Minor	E		10,00	380	152	38	38A	38	38A	
	<b>English</b>					<b>3</b>			<b>3</b>		
	<b>Examinations</b>					<b>3</b>			<b>3</b>		
1	Independent English Exam	C	School of Foreign Languages			3			3A		Foreign language
	<b>General Courses</b>			<b>4,00</b>	<b>152</b>	<b>30</b>	<b>8</b>	<b>22</b>			
	<b>Optional General Courses</b>			<b>4,00</b>	<b>152</b>	<b>30</b>	<b>8</b>	<b>22</b>			

1	Legal Literacy	C	департамент права цифровых технологий и биоправа	4,00	152	30	8	22A		Online Course
	<b>Internship</b>			<b>4,00</b>	<b>152</b>	<b>2</b>				<b>2</b>
	<b>Project Internship</b>			<b>4,00</b>	<b>152</b>	<b>2</b>				<b>2</b>
1	Научно-исследовательские проекты	E		4,00	152	2				2A

**Curriculum agreed:**

Academic Supervisor YAROSLAVTSEV A.B. 04.04.2022

Dean KOTOV V.I. 04.04.2022

Head of Degree Programmes  
Development Office MAMONOVA M.A. 14.04.2022

\* Subject type:

Compulsory course

C

Elective course

E

Optional course

O