

## National Research University Higher School of Economics (HSE)

## Curriculum

Field of study 04.03.01 Chemistry

Educational Programme "Chemistry"

Specialization: "Functional Materials and Petroleum Chemistry",  
"Organic and Organometallic Chemistry"

Faculty of Chemistry, HSE - Moscow

1 st, 2021/2022 academic year

APPROVED by  
Vice RectorROSHCHIN Y.S.  
30.03.2021

Length of Programme: 4 years

Years of Study: 2021/2022 - 2024/2025

Mode of Study: Full Time

Degree: Bachelor's degree

Number of Students: 44

Number of Groups: 2

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>1 191</b>	<b>240</b>	<b>288</b>	<b>353</b>	<b>310</b>	
<b>Data Culture</b>				<b>7</b>	<b>266</b>	<b>115</b>	<b>28</b>	<b>28</b>	<b>37</b>	<b>22</b>	
1	Independent Digital Competence Assessment. Digital Literacy	C	центр поддержки и мониторинга образовательных программ			3			3A		
2	Digital Literacy. Information Technology in Chemistry	C	Faculty of Chemistry	7	266	112	28	28	34	22A	Online Course
<b>Major</b>				<b>44</b>	<b>1 672</b>	<b>764</b>	<b>134</b>	<b>192</b>	<b>236</b>	<b>202</b>	
<b>Core Professional Block (Major)</b>				<b>41</b>	<b>1 558</b>	<b>742</b>	<b>134</b>	<b>192</b>	<b>226</b>	<b>190</b>	
<b>Subject Areas</b>				<b>41</b>	<b>1 558</b>	<b>742</b>	<b>134</b>	<b>192</b>	<b>226</b>	<b>190</b>	
<b>Mathematics</b>				<b>14</b>	<b>532</b>	<b>264</b>	<b>56</b>	<b>64</b>	<b>72</b>	<b>72</b>	
1	Linear Algebra and Geometry	C	Department of Higher Mathematics	7	266	132	28	32A	36	36A	
2	Calculus	C	Department of Higher Mathematics	7	266	132	28	32A	36	36A	
<b>Fundamentals of Physical Chemistry</b>				<b>5</b>	<b>190</b>	<b>64</b>		<b>28</b>	<b>36</b>		
1	Basic Physical Chemistry	C	Faculty of Chemistry	5	190	64		28	36A		
<b>Physics</b>				<b>6</b>	<b>228</b>	<b>108</b>		<b>32</b>	<b>38</b>	<b>38</b>	
1	Physics	C	School of Electronic Engineering	6	228	108		32	38	38A	
<b>Chemistry of Elements</b>				<b>16</b>	<b>608</b>	<b>306</b>	<b>78</b>	<b>68</b>	<b>80</b>	<b>80</b>	
1	Theoretical Inorganic Chemistry	C	Faculty of Chemistry	8	304	160			80A	80A	
2	Chemistry of the Elements	C	Faculty of Chemistry	8	304	146	78	68A			
<b>Elective Professional Block (Major)</b>				<b>3</b>	<b>114</b>	<b>22</b>			<b>10</b>	<b>12</b>	
<b>Раздел 1. Обязательные дисциплины</b>				<b>3</b>	<b>114</b>	<b>22</b>			<b>10</b>	<b>12</b>	
1	Research seminar	C	Faculty of Chemistry	3	114	22			10	12A	

	<b>English</b>					<b>146</b>	<b>24</b>	<b>32</b>	<b>44</b>	<b>46</b>	
	<b>Optional Courses</b>					<b>144</b>	<b>24</b>	<b>32</b>	<b>44</b>	<b>44</b>	
1	English	O		8		144	24	32A	44	44A	Credits only to the cumulative rating
	<b>Examinations</b>					<b>2</b>				<b>2</b>	
1	English Language Integrative Exam	C	School of Foreign Languages			2				2A	Foreign language
	<b>General Courses</b>			<b>1</b>	<b>38</b>	<b>162</b>	<b>54</b>	<b>36</b>	<b>36</b>	<b>36</b>	
	<b>Core General Courses</b>			<b>1</b>	<b>38</b>	<b>162</b>	<b>54</b>	<b>36</b>	<b>36</b>	<b>36</b>	
1	Safe Living Basics	C	центр поддержки студенческих инициатив	1	38	18	18A				Online Course
2	Physical Training	C	Department of Physical Training			144	36	36	36	36A	
	<b>Internship</b>			<b>8</b>	<b>304</b>	<b>4</b>				<b>4</b>	
	<b>Research Internship</b>			<b>4</b>	<b>152</b>	<b>2</b>				<b>2</b>	
1	Курсовая работа по неорганической химии	C		4	152	2				2A	
	<b>Project Internship</b>			<b>4</b>	<b>152</b>	<b>2</b>				<b>2</b>	
1	Научно-исследовательские проекты	E		4	152	2				2A	

Academic Supervisor

YAROSLAVTSEV A.B.

22.03.2021

Dean

KOTOV V.I.

22.03.2021

Head of Degree Programmes  
Development Office

MAMONOVA M.A.

30.03.2021

\* Subject type:

Compulsory course

C

Elective course

E

Optional course

O