



National Research University Higher School of Economics (HSE)

Curriculum  
 Field of study 09.03.01 Information Science and Computation  
 Technology  
 Educational Programme "Information Science and Computation  
 Technology"  
 Specializations: "Automated systems", "Computer Systems and  
 Networks", "Elements and devices of embedded systems"  
 Implementing unit: Tikhonov Moscow Institute of Electronics and  
 Mathematics, HSE - Moscow  
 4 th, 2023/2024 academic year

APPROVED  
 16.03.2023  
 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>294</b>	<b>98</b>	<b>104</b>	<b>88</b>	<b>6</b>	
<b>Major</b>				<b>36,00</b>	<b>1 368</b>	<b>254</b>	<b>82</b>	<b>88</b>	<b>84</b>		
<b>Elective Professional Block (Major)</b>				<b>36,00</b>	<b>1 368</b>	<b>254</b>	<b>82</b>	<b>88</b>	<b>84</b>		
<b>Блоки дисциплин по выбору</b>				<b>23,00</b>	<b>874</b>	<b>224</b>	<b>74</b>	<b>74</b>	<b>76</b>		
<b>Автоматизированные системы</b>				<b>23,00</b>	<b>874</b>	<b>224</b>	<b>74</b>	<b>74</b>	<b>76</b>		
1	High-Level Modelling and Simulation of Digital Systems	C	School of Computer Engineering	9,00	342	76	20	20A	36A		
2	System Design of Digital Devices	C	School of Computer Engineering	8,00	304	86	20A	26	40A		
3	Artificial Intelligence Systems	C	School of Computer Engineering	6,00	228	62	34	28A			
<b>Вычислительные системы и компьютерные сети</b>				<b>23,00</b>	<b>874</b>	<b>224</b>	<b>74</b>	<b>74</b>	<b>76</b>		
1	Multimedia Technologies	C	School of Computer Engineering	9,00	342	76	20	20A	36A		
2	Network Administration Practice	C	School of Computer Engineering	6,00	228	62	34	28A			
3	Web Application Design	C	School of Computer Engineering	8,00	304	86	20A	26	40A		
<b>Элементы и устройства встраиваемых систем</b>				<b>23,00</b>	<b>874</b>	<b>224</b>	<b>74</b>	<b>74</b>	<b>76</b>		
1	Embedded and Distributed Control Systems	C	School of Computer Engineering	9,00	342	76	20	20A	36A		
2	Standard and Custom Interfaces	C	School of Computer Engineering	6,00	228	62	34	28A			

3	Digital Signal Processing	C	School of Computer Engineering	8,00	304	86	20A	26	40A		
<b>Вариативные дисциплины по выбору ОП</b>				<b>9,00</b>	<b>342</b>	<b>14</b>		<b>6</b>	<b>8</b>		
1	Information Protection	C	Department of Computer Security	5,00	190	8			8A		Online Course
2	Mobile Applications Development	C	School of Computer Engineering	4,00	152	6		6A			Online Course, Foreign language
<b>Научно-исследовательский/Проектный семинар</b>				<b>4,00</b>	<b>152</b>	<b>16</b>	<b>8</b>	<b>8</b>			
1	Project Seminar "Project Documentation"	C	School of Computer Engineering	4,00	152	16	8	8A			
<b>English</b>				<b>1,00</b>	<b>38</b>	<b>2</b>			<b>2</b>		
<b>Optional Courses</b>											
1	Academic Writing	O		2,00	76	48		28	20A		Foreign language, Credits only to the cumulative rating
<b>Examinations</b>				<b>1,00</b>	<b>38</b>	<b>2</b>			<b>2</b>		
1	Project Proposal	C	School of Computer Engineering	1,00	38	2			2A		Foreign language
<b>Final State Certification (FSC)</b>				<b>3,00</b>	<b>114</b>	<b>2</b>				<b>2</b>	
<b>Thesis Work</b>				<b>3,00</b>	<b>114</b>	<b>2</b>				<b>2</b>	
1	Presenting of Graduation Thesis	C		3,00	114	2				2A	
<b>General Courses</b>				<b>4,00</b>	<b>152</b>	<b>30</b>	<b>14</b>	<b>16</b>			
<b>Optional General Courses</b>				<b>4,00</b>	<b>152</b>	<b>30</b>	<b>14</b>	<b>16</b>			
1	Economics	C	Department of Theoretical Economics	4,00	152	30	14	16A			Online Course
<b>Internship</b>				<b>16,00</b>	<b>608</b>	<b>6</b>	<b>2</b>		<b>2</b>	<b>4</b>	
<b>Research Internship</b>				<b>16,00</b>	<b>608</b>	<b>6</b>			<b>2</b>	<b>4</b>	
1	Qualifying Internship	C		4,00	152	2			2A		
2	Preparation of Graduation Thesis	C		8,00	304	2				2	
3	Graduation Internship	C		4,00	152	2				2A	
<b>Professional Internship</b>								<b>2</b>			
1	Work Experience Internship	C				2	2A				

**Curriculum agreed:**

Academic Supervisor POLESSKIY S.N. 20.02.2023

Dean KROUK E.A. 20.02.2023

Head of Centre for Educational Model Design LEPESHKIN I.A. 03.03.2023

\* Subject type:

Compulsory course

C

Elective course

E

Optional course

O

