

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

## Curriculum

Field of study 01.03.04 Applied Mathematics

Educational Programme "Applied Mathematics"

Tikhonov Moscow Institute of Electronics and Mathematics,  
HSE - Moscow

2 nd, 2021/2022 academic year

APPROVED by  
Vice RectorROSHCHIN Y.S.  
08.04.2021

Length of Programme: 4 years

Years of Study: 2020/2021 - 2023/2024

Mode of Study: Full Time

Degree: Bachelor's degree

Number of Students: 140

Number of Groups: 5

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>1 117</b>	<b>246</b>	<b>276</b>	<b>318</b>	<b>277</b>	
	<b>Major</b>			<b>39</b>	<b>1 482</b>	<b>612</b>	<b>136</b>	<b>138</b>	<b>170</b>	<b>168</b>	
	<b>Core Professional Block (Major)</b>			<b>37</b>	<b>1 406</b>	<b>604</b>	<b>130</b>	<b>138</b>	<b>170</b>	<b>166</b>	
	<b>Subject Areas</b>			<b>37</b>	<b>1 406</b>	<b>604</b>	<b>130</b>	<b>138</b>	<b>170</b>	<b>166</b>	
	<b>Natural Sciences and Engineering</b>			<b>8</b>	<b>304</b>	<b>152</b>	<b>36</b>	<b>36</b>	<b>40</b>	<b>40</b>	
1	Theoretical Mechanics	C	Department of Applied Mathematics	4	152	80			40A	40A	
2	Physics	C	School of Electronic Engineering	4	152	72	36	36A			
	<b>Real, Complex and Functional Analysis</b>			<b>13</b>	<b>494</b>	<b>230</b>	<b>28</b>	<b>32</b>	<b>84</b>	<b>86</b>	
1	Calculus	C	Department of Applied Mathematics	5	190	60	28	32A			
2	Theory of Complex Functions	C	Department of Applied Mathematics	4	152	90			44	46A	
3	Functional Analysis	C	Department of Applied Mathematics	4	152	80			40	40A	
	<b>Differential Equations</b>			<b>4</b>	<b>152</b>	<b>74</b>	<b>38</b>	<b>36</b>			
1	Differential Equations	C	Department of Applied Mathematics	4	152	74	38A	36A			
	<b>Programming</b>			<b>6</b>	<b>228</b>	<b>28</b>	<b>28</b>				
1	Algorithmization and Programming	C	Department of Applied Mathematics	6	228	28	28A				
	<b>Probability Theory and Mathematical Statistics</b>			<b>6</b>	<b>228</b>	<b>120</b>		<b>34</b>	<b>46</b>	<b>40</b>	
1	Probability Theory and Mathematical Statistics	C	Department of Applied Mathematics	6	228	120		34	46A	40A	
	<b>Elective Professional Block (Major)</b>			<b>2</b>	<b>76</b>	<b>8</b>	<b>6</b>			<b>2</b>	
	<b>Научно-исследовательский Проектный семинар</b>			<b>2</b>	<b>76</b>	<b>8</b>	<b>6</b>			<b>2</b>	

1	International Research and Development Projects	C	Department of Applied Mathematics	2	76	8	6			2A	Foreign language
	<b>Minor</b>			<b>10</b>	<b>380</b>	<b>152</b>	<b>38</b>	<b>38</b>	<b>38</b>	<b>38</b>	
1	Minor	C		10	380	152	38	38A	38	38A	
	<b>English</b>					<b>107</b>	<b>28</b>	<b>32</b>	<b>44</b>	<b>3</b>	
	<b>Optional Courses</b>					<b>104</b>	<b>28</b>	<b>32</b>	<b>44</b>		
1	English	O		6		104	28	32A	44		Foreign language, Credits only to the cumulative rating
	<b>Examinations</b>					<b>3</b>				<b>3</b>	
1	Independent English Language Test	C	центр поддержки и мониторинга образовательных программ			3				3A	
	<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>102</b>	<b>8</b>	<b>32</b>	<b>30</b>	<b>32</b>	
	<b>Project Internship</b>			<b>10</b>	<b>380</b>	<b>102</b>	<b>8</b>	<b>32</b>	<b>30</b>	<b>32</b>	
1	Исследовательский или прикладной проект	E		3	114	2				2A	
2	Computer Practicum 2	C	Department of Applied Mathematics	3	114	64		24A	20	20A	Online Course
3	Computer Practicum in Mathematics-I	C	Department of Applied Mathematics	4	152	36	8	8	10	10A	

Academic Supervisor

BUROVSKIY E.A.

26.03.2021

Dean

KROUK E.A.

31.03.2021

Head of Degree Programmes  
Development Office

MAMONOVA M.A.

07.04.2021

\* Subject type:

Compulsory course

C

Elective course

E

Optional course

O