

## 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", "Information and analytical Systems"

Implementing unit: Tikhonov Moscow Institute of Electronics and Mathematics, HSE - Moscow
2 nd, 2024/2025 academic year

ROSHCHIN S.Y.

**APPROVED** 

19.04.2024

Vice Rector

Signed with EDS

Length of Programme: 4 years Years of Study: 2023/2024 - 2026/2027

Mode of Study: Full Time Degree: Bachelor's degree

	Course	Subject Department type	Credits	Total Academic Hours	Contact Hours	Allocation of Contact Hours					
Block Code						1	2	3	4	Additional Information	
	Degree Progamme			60,00	2 442	1 158	222	242	308	386	
	Data Culture					6		2	4		
1	External Examinations on Digital Skills. Entry-level	С	отдел развития цифровых компетенций			2		2A			
2	External Examinations on Digital Skills. Intermediate Level	С	отдел развития цифровых компетенций			2				2A	
3	Independent Programming Test. Intermediate	С	отдел развития цифровых компетенций			2			2A		Online Course
	Major			46,00	1 748	742	148	166	230	198	
	Core Professional Block (Major)			32,00	1 216	582	120	128	176	158	
1	Databases	С	School of Computer Engineering	4,00	152	94			54	40A	Online Course
2	Discrete Mathematics	С	Department of Applied Mathematics	4,00	152	60	28	32A			
3	Calculus	С	Department of Applied Mathematics	4,00	152	56	28	28A			
4	Object-Oriented Programming	С	School of Computer Engineering	4,00	152	60	28	32A			
5	Automata Theory and Control	С	School of Computer Engineering	3,00	114	74			40	34A	
6	Probability Theory and Mathematical Statistics	С	Department of Applied Mathematics	3,00	114	72			36	36A	Online Course
7	Physics	С	School of Electronic Engineering	4,00	152	72	36	36A			

8	Electronics	С	School of Electronic Engineering	3,00	114	48				48A	
9	Electrical Engineering	С	School of Electronic Engineering	3,00	114	46			46A		
	Elective Professional Block (Major	r)		14,00	532	160	28	38	54	40	
	Дисциплины по выбору ОП			3,00	114	6	6				
1	Computer Graphics	С	School of Computer Engineering	3,00	114	6	6A				Online Course
	-			11,00	418	154	22	38	54	40	
1	Scientific Research Seminar "Artificial Intelligence in Engineering Education"	С	School of Computer Engineering	3,00	114	28		14	14A		Online Course
2	Project Seminar "Computer Practice in Mathematics"	С	School of Computer Engineering	3,00	114	70	14	16A	20	20A	
3	Project seminar "Practical implementation of the modern technologies for creating information systems"	С	School of Computer Engineering	3,00	114	40			20	20A	
4	Project Seminar "Project Documentation"	С	School of Computer Engineering	2,00	76	16	8	8A			
	Minor			10,00	380	152	38	38	38	38	
1	Minor	С		10,00	380	152	38	38A	38	38A	
	English										
	Optional Courses										
1	English	0		6,00	228	100	32	28	40A		Foreign language, Credits only to the cumulative rating
	General Courses			1,00	200	144	36	36	36	36	
	Core General Courses			1,00	200	144	36	36	36	36	
1	Physical Training	С	Department of Physical Training	1,00	200	144	28	28	44	44A	
	Internship			3,00	114	114				114	
	Project Internship			3,00	114	114				114	
1	Research or Applied Project	С		3,00	114	114				114A	

## Curriculum agreed:

Academic Supervisor POLESSKIY S.N. 01.03.2024

Dean KROUK E.A. 01.03.2024

Head of Centre for

Educational Model Design LEPESHKIN I.A. 18.04.2024

С О

\* Subject type:

Compulsory course

Optional course