National Research University Higher School of Economics (HSE)

Curriculum
Field of study 09.03.04 Software Engineering
Educational Programme "Software Engineering"
Specialization: "Industrial Software Engineering", "System Programming"
Faculty of Computer Science, HSE - Moscow
1 st, 2020/2021 academic year

APPROVED by
Vice Rector

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ROSHCHIN Y.S.

Length of Programme: 4 years
Years of Study: 2020/2021 - 2023/2024
Mode of Study: Full Time
Degree: Bachelor's degree

Number of Students: 300
Number of Groups: 10

Block Code	Course	Subject type	Department	Credits	Total Academic Hours	Contact Hours	Allocation of Contact Hours				Additional Information
							1	2	3	4	
	Degree Progamme			60	3 990	1 654	262	212	314	170	
	Major				3 496	1 328	184	144	224	80	
	Core Professional Block (Major)			52	2 356	888	124	84	88	80	
	Subject Areas			52	2 356	888	124	84	88	80	
	Algebra			14	532	178					
1	Algebra	C	Department of Big Data and Information Retrieval	14	532	178					
	Discrete Mathematics			10	380	140	28				
1	Discrete Mathematics	C	Department of Big Data and Information Retrieval	10	380	140	28	28			
	Mathematical Analysis			14	532	178					
1	Calculus	C	Department of Mathematics	14	532	178					
	Programming				760	348	96	84	88	80	
	Программирование				760	348	96	84	88	80	
1	Introduction to Programming	C	Department of Software Engineering	10	380	174	48A	42A	44	40A	
2	Programming in C/C++	C	базовая кафедра фирмы 1С	10	380	174	48A	42A	44	40A	
	Software Project Management			4	152	44					
1	Introduction into Software Engineering	C	Department of Software Engineering	4	152	44					
	Elective Professional Block (Major)				1 140	440	60	60	136		
	Научно-исследовательский семинар			3	1 140	440	60	60	136		
	Научно-исследовательский семинар				1 140	440	60	60	136		

#	Course	Type	Department	Credits							Notes
1	Research Seminar "Cloud Services of the Mir Payment System. Business Technology Service Design"	E	Department of Software Engineering	3	114	44	12	12	20A		
2	Research Seminar "Automata and Process Models"	E	Department of Software Engineering	3	114	44					
3	Research Seminar "Data analysis in Python"	E	Department of Software Engineering	3	114	44	12	12	20A		
4	Research Seminar "Geographic Information Systems"	E	Department of Software Engineering	3	114	44					
5	Research Seminar "Linux software distribution"	E	Department of Software Engineering	3	114	44	12	12	20A		
6	Research Seminar "Methods and algorithms of computer crime investigation"	E	Department of Software Engineering	3	114	44	12	12	20A		
7	Research Seminar "Neuroinformatics"	E	Department of Software Engineering	3	114	44	12	12	20A		
8	Research seminar "Neural Network Technologies"	E	Department of Software Engineering	3	114	44					
9	Research Seminar "Cloud and Mobile Application Development for Microsoft Platform"	E	Department of Software Engineering	3	114	44					
10	Research Seminar "Development of Cyber-Physical Systems"	E	Department of Software Engineering	3	114	44			36A		
	English				304	146	24	32	44	46	
	Optional Courses				304	144	24	32	44	44	
1	English	O		8	304	144	24	32A	44	44A	Credits only to the cumulative rating
	Examinations					2				2	
1	English Language Integrative Exam	C	School of Foreign Languages			2				2A	
	General Courses			5	190	180	54	36	46	44	
	Optional General Courses			4	152	18			10	8	
1	Economics	C	Department of Theoretical Economics	4	152	18			10	8A	Online Course
	Core General Courses			1	38	162	54	36	36	36	
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	

Academic Supervisor SHILOV V.V.

Dean ARZHANTSEV I.V.

Head of Degree Programmes
Development Office MAMONOVA M.A.

* Subject type:

Compulsory course	C
Elective course	E
Optional course	O