National Research University Higher School of Economics (HSE)

Curriculum
Field of study 09.04.04 Software Engineering
Educational Programme "System Programming"
Trajectories: "System Programming"
Implementing unit: Faculty of Computer Science, HSE - Moscow
1 st, 2025/2026 academic year

APPROVED
12.02.2025
Vice Rector
ROSHCHIN S.Y.
Signed with EDS

Length of Programme: 2 years
Years of Study: 2025/2026 - 2026/2027
Mode of Study: Full Time
Degree: Master's degree / MBA

Block Code	Course	Subject type	Department	Credits	Total Academic Hours	Contact Hours	Allocation of Contact Hours				Additional Information
							1	2	3	4	
	Degree Programme			**60,00**	**2 280**	**422**	**92**	**120**	**104**	**106**	
	System Programming (General track)			**60,00**	**2 280**	**422**	**92**	**120**	**104**	**106**	
	Major			**39,00**	**1 482**	**388**	**84**	**112**	**96**	**96**	
	Compulsory Disciplines 1 Academic Year			**39,00**	**1 482**	**388**	**84**	**112**	**96**	**96**	
1	Software Verification	C	Joint System Programming Department with Institute for System Programming of the Russian Academy of Sciences	6,00	228	56	28	28A			
2	Artificial Intelligence in Program Testing and Analysis	C	Joint System Programming Department with Institute for System Programming of the Russian Academy of Sciences	6,00	228	56	28	28A			
3	Compiler Technologies 1	C	Joint System Programming Department with Institute for System Programming of the Russian Academy of Sciences	6,00	228	64			32	32A	
4	Computer Networks and Telecommunications	C	Joint System Programming Department with Institute for System Programming of the Russian Academy of Sciences	6,00	228	56	28	28A			
5	Operating System Kernel Construction	C	Joint System Programming Department with Institute for System Programming of the Russian Academy of Sciences	6,00	228	64			32	32A	
6	Advanced Database Management Systems	C	Joint System Programming Department with Institute for System Programming of the Russian Academy of Sciences	6,00	228	64			32	32A	

#	Subject	Type	Department	Credits	Hours	P1	P2	P3	P4	P5
7	Applied System Analysis	C	Joint System Programming Department with Institute for System Programming of the Russian Academy of Sciences	3,00	114	28		28A		
	Key Seminars			**6,00**	**228**	**32**	**8**	**8**	**8**	**8**
1	Mentor's Seminar	C	Joint System Programming Department with Institute for System Programming of the Russian Academy of Sciences	6,00	228	32	8	8	8	8A
	Magolego			**6,00**	**228**					
1	All-university Pool MAGOLEGO Courses	C		6,00	228					
	Internship			**9,00**	**342**	**2**				**2**
	Fixed			**9,00**	**342**	**2**				**2**
1	Term Paper	C		6,00	228	2				2A
2	Work Experience Internship	C		3,00	114					

Curriculum agreed:

Academic Supervisor	Петренко А.К.	03.02.2025
Dean	ARZHANTSEV I.V.	04.02.2025
Head of Centre for Educational Model Design	LEPESHKIN I.A.	06.02.2025

* Subject type:
Compulsory course   C
Elective course   E