



National Research University Higher School of Economics (HSE)

Basic Curriculum

Field of study 09.04.04 Software Engineering
 Educational Programme "System and Software Engineering"
 Trajectories: "System and Software Engineering"
 Implementing unit: Faculty of Computer Science, HSE - Moscow

APPROVED
 12.05.2023
 Vice Rector
 ROSHCHIN S.Y.
 Signed with EDS

Years of Study: 2023/2024 - 2024/2025

Length of Programme: 2 years

Mode of Study: Full Time

Degree: Master's degree / MBA

Block Code	Course	Subject type	Credits	Credits by Years		Planned Educational Programme Development Results
				1	2	
	Degree Programme		120,00	60,00	60,00	
	System and Software Engineering (General track)		120,00	60,00	60,00	
	Key Seminars		15,00	12,00	3,00	
1	Research Seminar "Software Engineering: Development Management"-1	C	6,00	6,00		GPC-1.SEN, GPC-7.SEN, PC-1, PC-2, PC-3, UC-1, UC-4
2	Mentor's Seminar	C	9,00	6,00	3,00	GPC-3.SEN, GPC-6.SEN, PC-3, UC-1, UC-6
	Internship		24,00	6,00	18,00	
	Project Internship		6,00	6,00		
1	Term Project	C	6,00	6,00		PC-6, PC-7, PC-8
	Professional Internship		3,00		3,00	
1	Teaching Internship	C	3,00		3,00	GPC-6.SEN, PC-10, PC-11, UC-4
	Research Internship		15,00		15,00	
1	Preparation of Graduation Thesis	C	15,00		15,00	GPC-1.SEN, GPC-4.SEN, GPC-6.SEN, PC-1, PC-6, PC-8, UC-4, UC-6
	Major		63,00	36,00	27,00	
	Elective Courses 1st year		3,00	3,00		
1	Software Engineering Methodology (offered in a foreign language)	E	3,00	3,00		GPC-3.SEN, GPC-6.SEN, PC-14, PC-4, PC-8, UC-2
2	History of Software Engineering	E	3,00	3,00		GPC-3.SEN, GPC-6.SEN, PC-14, PC-4, PC-8, UC-6
	Compulsory Courses		60,00	33,00	27,00	

1	Applied System Analysis (offered in a foreign language)	C	6,00	6,00		GPC-1.SEN, GPC-4.SEN, PC-2, PC-6, UC-1, UC-3
2	Advanced Software Design (offered in a foreign language)	C	6,00	6,00		GPC-1.SEN, GPC-3.SEN, GPC-6.SEN, PC-1, PC-2, PC-8, PC-9, UC-5, UC-6
3	Software Business Management (offered in a foreign language)	C	6,00	6,00		PC-12, PC-15, PC-2, PC-6, UC-2
4	Formal Methods in Software Engineering	C	9,00	9,00		GPC-1.SEN, GPC-4.SEN, PC-2, PC-6, UC-1, UC-3
5	Data Analysis (offered in a foreign language)	C	6,00		6,00	GPC-3.SEN, GPC-4.SEN, PC-6, UC-2
6	Software Risk Management	C	6,00		6,00	GPC-8.SEN, PC-5, PC-7, UC-2, UC-4, UC-5
7	Advanced Databases (offered in a foreign language)	C	6,00		6,00	GPC-4.SEN, GPC-7.SEN, PC-1, PC-2, PC-6, UC-2
8	Effective Management of Virtual Teams	C	3,00		3,00	GPC-6.SEN, GPC-8.SEN, PC-14, UC-3, UC-6
9	Psychology of Software Development Team Management (offered in a foreign language)	C	6,00		6,00	GPC-1.SEN, PC-10, PC-11, PC-14, UC-4
10	Digital Interactive Products Development	C	6,00	6,00		GPC-1.SEN, GPC-8.SEN, PC-16, PC-3, PC-4, PC-6, UC-1, UC-2
	Magolego		15,00	6,00	9,00	
1	All-university Pool MAGOLEGO Courses	E	15,00	6,00	9,00	UC-1, UC-3, UC-6
	Final State Certification (FSC)		3,00		3,00	
1	Final Qualification Paper	C	3,00		3,00	GPC-1.SEN, GPC-2.SEN, GPC-3.SEN, GPC-4.SEN, GPC-5.SEN, GPC-6.SEN, GPC-7.SEN, GPC-8.SEN, PC-1, PC-10, PC-11, PC-12, PC-13, PC-14, PC-15, PC-16, PC-2, PC-3, PC-4, PC-5, PC-6, PC-7, PC-8, PC-9, UC-1, UC-2, UC-3, UC-4, UC-5, UC-6

Curriculum agreed:

Academic Supervisor		24.03.2023
Dean	ARZHANTSEV I.V.	24.03.2023
Head of Centre for Educational Model Design	LEPESHKIN I.A.	05.05.2023

* Subject type:

Compulsory course

C

Elective course

E