



National Research University Higher School of Economics (HSE)

Basic Curriculum

Field of study 38.03.05 Business Informatics

Educational Programme ""

Specializations: "Business Analytics", "Corporate Information Systems"

Implementing unit: Graduate School of Business, HSE - Moscow

APPROVED

23.05.2025

Vice Rector

ROSHCHIN S.Y.

Signed with EDS

Years of Study: 2025/2026 - 2028/2029

Length of Programme: 4 years

Mode of Study: Full Time

Degree: Bachelor's degree

Block Code	Course	Subject type	Credits	Credits by Years				Planned Educational Programme Development Results
				1	2	3	4	
	Degree Programme		240,00	60,00	60,00	60,00	60,00	
	Major		155,00	45,00	37,00	39,00	34,00	
	Core Professional Block (Major)		99,00	39,00	27,00	19,00	14,00	
1	Theory of Probability and Mathematical Statistics	C	5,00		5,00			GPC-1, PC-16, PC-17, PC-20, UC-1, UC-2
2	Strategic Management	C	4,00				4,00	GPC-1, GPC-2, PC-21, PC-22, PC-24, PC-3, PC-6, UC-2, UC-3
3	Sustainable Development and Corporate ESG Practices (offered in a foreign language)	C	3,00			3,00		GPC-2, PC-10, PC-20, PC-21, PC-22, PC-23, PC-24, PC-29, PC-30, PC-33, PC-5, PC-9, UC-3, UC-4, UC-5, UC-6
4	Enterprise Architecture	C	3,00			3,00		GPC-1, GPC-2, GPC-3, PC-1, PC-10, PC-11, PC-13, PC-14, PC-17, PC-2, PC-20, PC-21, PC-22, PC-23, PC-24, PC-28, PC-3, PC-4, PC-7, PC-8, PC-9, UC-1, UC-2
5	Business Processes Modelling and Analysis	C	3,00		3,00			GPC-1, GPC-2, GPC-3, PC-1, PC-10, PC-11, PC-13, PC-14, PC-15, PC-2, PC-25, PC-28, PC-4, PC-5, PC-6, UC-1, UC-2, UC-3
6	Python Programming	C	6,00		6,00			GPC-1, GPC-3, PC-10, PC-11, PC-12, PC-13, PC-15, PC-18, PC-30, PC-8, UC-1, UC-2, UC-3
7	Technological Entrepreneurship (offered in a foreign language)	C	4,00				4,00	GPC-2, PC-10, PC-20, PC-21, PC-22, PC-23, PC-24, PC-33, PC-5, PC-9, UC-3, UC-4, UC-5, UC-6, UC-9
8	Business Automation Subsystems	C	8,00			8,00		GPC-1, GPC-3, PC-13, PC-22

9	Introduction to Information Security	C	3,00				3,00	GPC-1, GPC-3, GPC-4, PC-11, PC-12, PC-14, PC-15, PC-20, PC-23, PC-25, PC-27, PC-4, PC-9, UC-2
10	Macroeconomics	C	4,00		4,00			GPC-2, PC-12, PC-6, PC-8, UC-9
11	Financial and Managerial Accounting	C	6,00		6,00			GPC-4, PC-2, PC-6, PC-7, UC-9
12	Quantitative Methods for Management Decisions	C	3,00		3,00			GPC-4, PC-26, UC-1
13	Fundamentals of Corporate Finance	C	5,00			5,00		GPC-4, PC-6, PC-7, UC-9
14	Introduction to Programming with Java, Part 1: Starting to Code with Java	C	6,00	6,00				GPC-1, GPC-3, PC-18, UC-1, UC-2
15	Software Engineering	C	3,00	3,00				GPC-1, GPC-3, PC-10, PC-11, PC-18, PC-22, PC-25, PC-28, PC-30, PC-31, PC-32, PC-33, PC-35, UC-1, UC-2
16	Management: Concepts and Technologies of the 21st Century	C	4,00	4,00				GPC-1, GPC-2, PC-21, PC-22, PC-24, PC-3, PC-6, UC-1, UC-2
17	Calculus	C	8,00	8,00				GPC-1, PC-16, PC-17, PC-20, UC-2
18	Discrete Mathematics	C	6,00	6,00				GPC-1, GPC-4, GPC-6, PC-31, PC-32, UC-2, UC-9
19	Linear Algebra	C	6,00	6,00				GPC-1, PC-16, PC-17, PC-20, UC-2
20	Team Management	C	3,00				3,00	GPC-1, GPC-2, GPC-3, PC-1, PC-16, PC-17, PC-2, PC-20, PC-4, PC-6, PC-7, PC-8, UC-2, UC-3, UC-9
21	Microeconomics	C	6,00	6,00				GPC-2, PC-12, PC-17, PC-6, PC-7, UC-9
	Elective Professional Block (Major)		56,00	6,00	10,00	20,00	20,00	
	Compulsory Courses		25,00		3,00	15,00	7,00	
1	Agile Methodologies in IT Projects	C	3,00				3,00	GPC-1, GPC-3, PC-11, PC-12, PC-14, PC-16, PC-17, PC-18, PC-19, PC-20, PC-27, UC-1, UC-2
2	1C Ecosystem	C	3,00		3,00			GPC-4, PC-16, PC-27, PC-29, PC-30, PC-35
3	Modern Methods of Data Science and Machine Learning	C	7,00			7,00		GPC-3, GPC-4, PC-26
4	IT Project Management	C	3,00			3,00		GPC-1, GPC-2, GPC-3, PC-10, PC-11, PC-14, PC-20, PC-23, PC-24, PC-25, PC-26, PC-28, PC-29, PC-3, PC-30, PC-33
5	Requirements Management and IS Design	C	5,00			5,00		GPC-1, GPC-3, PC-22, PC-24
6	Leadership and Team Management	C	4,00				4,00	GPC-2, PC-10, PC-20, PC-21, PC-22, PC-23, PC-24, PC-29, PC-30, PC-33, PC-5, PC-9, UC-3, UC-4, UC-5, UC-6, UC-8
	Научно-исследовательский / Проектный / Профориентационный семинар		15,00	6,00	2,00	2,00	5,00	
	Research seminar		5,00				5,00	

1	Research Seminar "Thesis Preparation Skills. Information Business Intelligence"	E	5,00				5,00	GPC-3, PC-1, PC-10, PC-11, PC-12, PC-13, PC-14, PC-16, PC-17, PC-19, PC-2, PC-20, PC-27, PC-28, PC-29, PC-3, PC-30, PC-32, PC-33, UC-1, UC-2
2	Research Seminar "Thesis Preparation Skills. Management of Information Systems"	E	5,00				5,00	GPC-3, PC-10, PC-12, PC-13, PC-15, PC-19, PC-20, PC-25, PC-26, PC-27, PC-28, PC-29, PC-3, PC-30, PC-32, PC-33, PC-9, UC-1, UC-2
3	Research Seminar "Thesis Preparation Skills. Digital Innovation in Business"	E	5,00				5,00	GPC-3, PC-1, PC-10, PC-11, PC-12, PC-13, PC-14, PC-17, PC-2, PC-21, PC-22, PC-23, PC-27, PC-28, PC-29, PC-3, PC-30, PC-32, PC-33, UC-1, UC-2
4	Research Seminar "Thesis Preparation Skills. Decision Making Modern Models and Methods"	E	5,00				5,00	GPC-3, PC-1, PC-10, PC-11, PC-12, PC-13, PC-14, PC-17, PC-2, PC-21, PC-22, PC-23, PC-27, PC-28, PC-29, PC-3, PC-30, PC-32, PC-33, UC-1, UC-2
	Project Seminar		6,00	2,00	2,00	2,00		
1	Project Seminar "Modeling of Organization"	C	2,00		2,00			GPC-3, PC-10, PC-13, PC-2, PC-20, PC-25, PC-28, PC-29, PC-3, PC-30, PC-32, PC-33, PC-7, PC-8, UC-1, UC-2, UC-3, UC-5, UC-6
2	Project Seminar "IT Consulting"	C	2,00			2,00		GPC-3, PC-10, PC-13, PC-20, PC-25, PC-28, PC-29, PC-3, PC-30, PC-32, PC-33, PC-34, PC-7, PC-8, UC-1, UC-2, UC-3, UC-5, UC-6
3	Project Seminar "SWOT Analysis"	C	2,00	2,00				GPC-3, PC-10, PC-13, PC-20, PC-25, PC-28, PC-29, PC-3, PC-30, PC-32, PC-33, PC-34, PC-7, PC-8, UC-1, UC-2, UC-3, UC-5, UC-6
	Профориентационный семинар		4,00	4,00				
1	Career Guidance Seminar "Introduction to Business Informatics"	C	4,00	4,00				GPC-3, PC-1, PC-2, PC-21, PC-22, PC-23, PC-25, PC-26, PC-27, PC-28, PC-3, PC-32, PC-33, PC-9, UC-1
	Specialization Disciplines		16,00		5,00	3,00	8,00	
	Корпоративные информационные системы		16,00		5,00	3,00	8,00	
	Обязательные дисциплины специализации		5,00		5,00			
1	Business-oriented Programming Development and Low-Code Systems	C	5,00		5,00			GPC-4, PC-16, PC-27, PC-29, PC-30, PC-35, PC-4
	Elective courses 3rd year		3,00			3,00		
1	Ensuring the quality of business applications	E	3,00			3,00		GPC-3, GPC-5, PC-16, PC-17
2	Business Applications Implementation Technologies	E	3,00			3,00		GPC-3, GPC-5, PC-17, PC-22
	Elective courses 4th year		8,00				8,00	
1	Methods and Tools for Improving Business Processes	E	4,00				4,00	GPC-1, PC-21, PC-28, PC-9

2	Implementation Projects Effectiveness Evaluation for Business Applications	E	4,00				4,00	GPC-3, GPC-5, PC-17, PC-22
3	Holdings and Corporations Automation	E	4,00				4,00	GPC-2, GPC-5, PC-15, PC-25, PC-35
	Бизнес-аналитика		16,00		5,00	3,00	8,00	
	Обязательные дисциплины специализации		5,00		5,00			
1	Data Mining	C	5,00		5,00			GPC-1, GPC-2, GPC-3, PC-14, PC-18, PC-31, PC-34, UC-1
	Elective courses 3rd year		3,00			3,00		
1	Analysis and Forecasts of Market Risks	E	3,00			3,00		PC-26, PC-7, PC-8, UC-1
2	Special chapters of decision theory	E	3,00			3,00		GPC-1, GPC-2, GPC-3, PC-11, PC-12, PC-14, PC-16, PC-17, PC-19, PC-20, PC-21, PC-22, PC-23, PC-24, PC-25, PC-27, PC-28, PC-29, PC-30, UC-1
	Elective courses 4th year		8,00				8,00	
1	Digital Product Management	E	4,00				4,00	PC-10, PC-11, PC-12, PC-14, PC-21, PC-22, PC-25, PC-32, PC-33, PC-35, PC-6, UC-1
2	Product Analytics	E	4,00				4,00	GPC-2, GPC-4, PC-10, PC-26, PC-32
3	Customer Experience Management	E	4,00				4,00	GPC-5, PC-17, PC-18, PC-29
	Internship		33,00	5,00	5,00	7,00	16,00	
	Fixed		19,00	5,00	5,00	7,00	2,00	
	Professional Internship		2,00			2,00		
1	Work-Experience Internship	C	2,00			2,00		GPC-2, UC-3, UC-4, UC-5
	Research Internship		17,00	5,00	5,00	5,00	2,00	
1	Graduation Internship	C	2,00				2,00	GPC-2, GPC-3, UC-3, UC-4, UC-5
2	Course Project: SWOT-Analysis	C	5,00	5,00				GPC-2, GPC-5, PC-11, PC-12, PC-13, PC-35, PC-8
3	Course Project: Organization Modelling	C	5,00		5,00			GPC-1, GPC-6, PC-14, PC-18, PC-2, PC-25, PC-31, PC-33, PC-6, UC-1, UC-2
4	Course Project: IT-Consulting	C	5,00			5,00		GPC-2, GPC-3, PC-10, PC-11, PC-12, PC-13, PC-14, PC-19, PC-20, PC-24, PC-25
	Free							
	Preparation of the Graduate Thesis		14,00				14,00	
1	Preparation of Graduation Thesis	C	14,00				14,00	GPC-3, UC-1, UC-2
	General Courses		14,00	3,00	5,00		6,00	
	Core General Courses		2,00	1,00	1,00			
1	Safe Living Basics	C	1,00	1,00				UC-8
2	Physical Training	C	1,00		1,00			UC-7
	Optional General Courses		12,00	2,00	4,00		6,00	
1	Introduction to law	C	3,00				3,00	PC-31, UC-1, UC-10, UC-2, UC-5
2	Philosophy	C	3,00				3,00	PC-22, PC-25, UC-3, UC-5, UC-6
3	Foundations of Russian Statehood	C	2,00	2,00				UC-5
4	Russian History	C	4,00		4,00			UC-1, UC-10, UC-5

	Minor		20,00		10,00	10,00		
1	Minor	E	20,00		10,00	10,00		GPC-1, GPC-2, GPC-3, UC-1, UC-11, UC-2, UC-3, UC-4, UC-5, UC-6
	Language and Communication		1,00				1,00	
	Examinations		1,00				1,00	
1	Independent English Exam (offered in a foreign language)	C						UC-4, UC-5
2	Project Proposal (offered in a foreign language)	C	1,00				1,00	UC-1, UC-2, UC-3, UC-4
3	Independent Russian Exam	C						PC-1, PC-27, UC-4
4	English Language Integrative Exam (offered in a foreign language)	C						UC-3, UC-4
	Optional Courses							
1	English (offered in a foreign language)	O	14,00	8,00	6,00			GPC-1, GPC-2, PC-1, PC-4, PC-7, UC-1, UC-3, UC-4, UC-5
2	Academic English Writing (offered in a foreign language)	O	2,00				2,00	UC-4
	Data Culture		14,00	7,00	3,00	4,00		
1	Databases	C	3,00		3,00			GPC-1, GPC-3, PC-1, PC-15, PC-18, PC-2, PC-20, PC-23, PC-26, PC-27, PC-4, PC-8, PC-9, UC-1, UC-2
2	Data Warehouse	C	3,00			3,00		GPC-1, GPC-2, GPC-3, PC-1, PC-11, PC-12, PC-14, PC-16, PC-17, PC-18, PC-2, PC-20, PC-21, PC-22, PC-23, PC-26, PC-28, PC-3, PC-9, UC-1, UC-2
3	Data Science, AI and Generative Models Independent Test. Advanced Level	C	1,00			1,00		GPC-1, GPC-3, UC-1, UC-2
4	Independent Digital Literacy Test	C						GPC-1, GPC-3, PC-11, UC-1, UC-2
5	External Examinations on Digital Skills. Final Level	C						GPC-2, GPC-6
6	External Examinations on Digital Skills. Entry-level	C						GPC-5, GPC-6
7	External Examinations on Digital Skills. Intermediate Level	C						GPC-2, GPC-6
8	Independent Programming Test. Advanced Level	C						GPC-1, GPC-3, UC-1, UC-2
9	Algorithms and Data Structures	C	7,00	7,00				GPC-1, GPC-3, PC-1, PC-11, PC-13, PC-14, PC-15, PC-16, PC-17, PC-2, PC-20, PC-23, PC-26, PC-27, PC-28, PC-6, PC-9, UC-1, UC-2
	Final State Certification (FSC)		3,00				3,00	
	Thesis Work		3,00				3,00	
1	Presenting of Graduation Thesis	C	3,00				3,00	GPC-1, GPC-2, GPC-3, PC-1, PC-10, PC-11, PC-12, PC-13, PC-14, PC-15, PC-16, PC-17, PC-18, PC-19, PC-20, PC-21, PC-22, PC-23, PC-24, PC-25, PC-26, PC-27, PC-28, PC-29, PC-3, PC-30, PC-31, PC-32, PC-33, PC-4, PC-5, PC-6, PC-7, PC-8, PC-9, UC-2, UC-3, UC-4

Curriculum agreed:

Academic Supervisor	Зараменских Е.П.	12.05.2025
Dean	GABRIELOV A.O.	13.05.2025
Head of Centre for Educational Model Design	LEPESHKIN I.A.	23.05.2025

* Subject type:

Compulsory course	C
Elective course	E
Optional course	O