



National Research University Higher School of Economics (HSE)

Basic Curriculum

Field of study 38.03.05 Business Informatics
Educational Programme "Business Informatics"

Implementing unit: St. Petersburg School of Economics and Management, HSE, HSE - Saint Petersburg

Years of Study: 2024/2025 - 2027/2028

Length of Programme: 4 years

Mode of Study: Full Time

Degree: Bachelor's degree

APPROVED
06.05.2024
Vice Rector
ROSHCHIN S.Y.
Signed with EDS

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		163,00	51,00	40,00	40,00	32,00	
	Core Professional Block (Major)		105,00	46,00	22,00	26,00	11,00	
1	Discrete Mathematics	C	6,00	6,00				GPC-2, GPC-6, PC-12
2	Microeconomics	C	5,00		5,00			GPC-2, GPC-6, PC-1
3	Business Communications	C	3,00	3,00				PC-7, PC-8, UC-11, UC-4
4	Theory of Probability and Mathematical Statistics	C	5,00		5,00			GPC-2, PC-1, PC-12
5	Business Processes Modelling and Analysis	C	3,00		3,00			GPC-1, PC-3, PC-9
6	Algorithms and Data Structures	C	6,00	6,00				GPC-3, PC-10, PC-2
7	Data Bases	C	5,00		5,00			GPC-3, PC-10, PC-9
8	BI systems and data visualization	C	3,00			3,00		GPC-2, PC-10, PC-2
9	Financial and Managerial Accounting	C	4,00		4,00			GPC-1, PC-1, PC-11
10	Enterprise Architecture	C	6,00			6,00		GPC-1, PC-14, PC-3, PC-9, UC-1
11	Introduction to Information Security	C	4,00				4,00	GPC-4, PC-14, PC-5
12	Quantitative Decision Making in a Big Data Society	C	5,00			5,00		GPC-1, PC-1, PC-12
13	Financial Management (offered in a foreign language)	C	3,00			3,00		GPC-1, PC-11, PC-14
14	Leadership and Team Management	C	3,00				3,00	PC-7, PC-8, UC-4
15	IT Project Management (offered in a foreign language)	C	4,00				4,00	GPC-3, PC-16, PC-8
16	Information Systems Design	C	6,00			6,00		GPC-4, PC-10, PC-15, PC-6, PC-7
17	Operational and strategic management	C	3,00			3,00		GPC-4, PC-14, PC-4
18	General Management	C	3,00	3,00				PC-16, UC-2, UC-5
19	Linear Algebra and Analytic Geometry I	C	5,00	5,00				GPC-6, PC-12
20	Mathematics.Mathematical Analysis I	C	4,00	4,00				GPC-6, PC-12
21	Linear Algebra and Analytic Geometry II	C	4,00	4,00				GPC-6, PC-12
22	Mathematics.Mathematical Analysis II	C	5,00	5,00				GPC-6, PC-12

23	Java Programming	C	6,00	6,00				GPC-3, PC-10, PC-17, PC-2
24	Software Engineering	C	4,00	4,00				GPC-3, PC-10, PC-2
	Elective Professional Block (Major)		58,00	5,00	18,00	14,00	21,00	
	Обязательные дисциплины программы		41,00	5,00	15,00	11,00	10,00	
1	Business-oriented Programming Development and Low-Code Systems	C	5,00		5,00			GPC-3, GPC-4, PC-10, PC-17, PC-2
2	Information Systems and Organisations	C	5,00		5,00			GPC-3, PC-10, PC-17, PC-2
3	Data analysis practices	C	6,00			6,00		GPC-5, PC-1, PC-12
4	Enterprise Economy	C	3,00		3,00			PC-11, PC-4, UC-10, UC-5
5	Big Data, ETL processes and data quality	C	6,00				6,00	GPC-4, PC-16, PC-2, PC-4
6	Econometrics	C	3,00			3,00		GPC-2, PC-1, PC-12
7	Technological Entrepreneurship	C	4,00				4,00	PC-16, PC-17, UC-11, UC-3, UC-9
8	Project Seminar "SWOT Analysis"	C	2,00	2,00				GPC-4, PC-14, PC-4
9	Project Seminar "Modeling of Organization"	C	2,00		2,00			GPC-4, PC-15, PC-3, PC-9
10	Project seminar "Design and delivery of information systems"	C	2,00			2,00		GPC-4, PC-10, PC-6, PC-7
11	Career Guidance Seminar "Introduction to Business Informatics"	C	3,00	3,00				GPC-2, GPC-6, UC-1
	Elective disciplines (2 year)		3,00		3,00			
1	Enterprise management in a competitive environment	E	3,00		3,00			PC-4
2	Marketing of IT products	E	3,00		3,00			GPC-3, PC-12, PC-2
	Дисциплины по выбору (3 курс)		3,00			3,00		
1	Data Warehouse	E	3,00			3,00		PC-10, PC-9
2	Game Theory	E	3,00			3,00		PC-1, PC-12
	Elective Disciplines (4th year)		8,00				8,00	
1	Information Systems Performance Assessment	E	4,00				4,00	GPC-2, PC-11
2	Systems Thinking	E	4,00				4,00	GPC-2, PC-13, UC-1
3	Marketing Analytics	E	4,00				4,00	GPC-2, GPC-6, PC-1
4	Digital Product Management and Product Analytics	E	4,00				4,00	PC-16, PC-17
	-		3,00				3,00	
1	Research Seminar "Information Business Intelligence"	E	3,00				3,00	GPC-4, PC-12, PC-13
2	Research Seminar "Management of Information Systems"	E	3,00				3,00	PC-12, PC-13
	Internship		30,00	2,00	2,00	6,00	20,00	
	Professional Internship		4,00				4,00	
1	Work Experience Internship	C	4,00				4,00	GPC-1, GPC-2, GPC-3, GPC-4, GPC-5, GPC-6, PC-1, PC-10, PC-11, PC-12, PC-13, PC-14, PC-15, PC-16, PC-17, PC-2, PC-3, PC-4, PC-5, PC-6, PC-7, PC-8, PC-9, UC-1, UC-10, UC-11, UC-2, UC-3, UC-4, UC-5, UC-6, UC-7, UC-8, UC-9
	Project Internship		10,00	2,00	2,00	6,00		

1	Course project: SWOT analysis	C	2,00	2,00			GPC-4, PC-14, PC-4, UC-3
2	Course project: organization modeling	C	2,00		2,00		GPC-1, PC-15, PC-3, PC-9, UC-3
3	Course project: design and implementation of an information system	C	6,00			6,00	GPC-2, GPC-3, PC-10, PC-6, PC-7, UC-3
	Research Internship		16,00			16,00	
1	Graduation Internship	C	2,00			2,00	GPC-1, GPC-2, GPC-3, GPC-4, GPC-5, GPC-6, PC-1, PC-10, PC-11, PC-12, PC-13, PC-14, PC-15, PC-16, PC-17, PC-2, PC-3, PC-4, PC-5, PC-6, PC-7, PC-8, PC-9, UC-1, UC-10, UC-11, UC-2, UC-3, UC-4, UC-5, UC-6, UC-7, UC-8, UC-9
2	Preparation of Graduation Thesis	C	14,00			14,00	GPC-1, GPC-2, GPC-3, GPC-4, GPC-5, GPC-6, PC-1, PC-10, PC-11, PC-12, PC-13, PC-14, PC-15, PC-16, PC-17, PC-2, PC-3, PC-4, PC-5, PC-6, PC-7, PC-8, PC-9, UC-1, UC-10, UC-11, UC-2, UC-3, UC-4, UC-5, UC-6, UC-7, UC-8, UC-9
	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	Law	C	3,00			3,00	UC-2
2	Russian History	C	4,00		4,00		UC-5
3	Philosophy	C	3,00			3,00	UC-3, UC-6
4	Foundations of Russian Statehood	C	2,00	2,00			UC-10, UC-9
	Minor		20,00		10,00	10,00	
1	Minor	C	20,00		10,00	10,00	UC-2, UC-3, UC-5
	English		1,00			1,00	
	Examinations		1,00			1,00	
1	Independent English Exam (offered in a foreign language)	C					UC-4
2	Project Proposal (offered in a foreign language)	C	1,00			1,00	GPC-1, GPC-2, GPC-3, GPC-4, GPC-5, GPC-6, PC-1, PC-10, PC-11, PC-12, PC-13, PC-14, PC-2, PC-3, PC-4, PC-5, PC-6, PC-7, PC-8, PC-9, UC-1, UC-2, UC-4
3	English Language Integrative Exam (offered in a foreign language)	C					UC-4
	Optional Courses						
1	Academic English Writing (offered in a foreign language)	O	2,00			2,00	UC-4
2	English language (offered in a foreign language)	O	14,00	8,00	6,00		UC-4

	Data Culture		11,00	4,00	3,00	4,00	
1	Introduction to Data Analytics	C	4,00	4,00			GPC-4, PC-12, PC-2
2	Introduction to Python for Data Science	C	3,00		3,00		GPC-4, PC-10, PC-2
3	Modern Machine Learning and Artificial Intelligence Technologies	C	3,00			3,00	GPC-4, PC-12, PC-2
4	Data Science, AI and Generative Models Independent Test. Advanced Level	C	1,00			1,00	GPC-4, PC-10, PC-2
5	Independent Programming Test. Advanced Level	C					GPC-3, PC-10, PC-17, PC-2
6	Independent Digital Literacy Test	C					GPC-4, PC-2
7	External Examinations on Digital Skills. Entry-level	C					GPC-4, PC-2
8	External Examinations on Digital Skills. Intermediate Level	C					GPC-4, PC-2
9	External Examinations on Digital Skills. Final Level	C					GPC-4, PC-2
	Final State Certification (FSC)		1,00			1,00	
	Thesis Work		1,00			1,00	
1	Presenting of Graduation Thesis	C	1,00			1,00	GPC-1, GPC-2, GPC-3, GPC-4, GPC-5, GPC-6, PC-1, PC-10, PC-11, PC-12, PC-13, PC-14, PC-15, PC-16, PC-17, PC-2, PC-3, PC-4, PC-5, PC-6, PC-7, PC-8, PC-9, UC-1, UC-10, UC-11, UC-2, UC-3, UC-4, UC-5, UC-6, UC-7, UC-8, UC-9

Curriculum agreed:

Academic Supervisor		23.04.2024
Dean	LEZINA T.A.	23.04.2024
Deputy Director	KUZMIN P.V.	24.04.2024
Head of Centre for Educational Model Design	LEPESHKIN I.A.	06.05.2024

* Subject type:

Compulsory course	C
Elective course	E
Optional course	O