



National Research University Higher School of Economics (HSE)

Basic Curriculum

Field of study 01.03.02 Applied Mathematics and Information Science,
38.03.02 Management

Educational Programme "Digital Platforms and Logistics"

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

Years of Study: 2022/2023 - 2025/2026

Length of Programme: 4 years

Mode of Study: Full Time

Degree: Bachelor's degree

APPROVED

31.05.2022

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		191,00	50,00	57,00	54,00	30,00	
	Core Professional Block (Major)		106,00	44,00	47,00	12,00	3,00	
1	Strategic Management	C	3,00			3,00		GPC-3.MAN, GPC-4.MAN, UC-1
2	Business Communications	C	3,00				3,00	UC-3, UC-4, UC-6
3	Theory of finance and financial technologies	C	3,00		3,00			GPC-3.MAN, GPC-4.MAN, UC-2
4	Marketing	C	4,00		4,00			GPC-1.MAN, GPC-3.MAN, GPC-4.MAN, PC-6, UC-3
5	SQL for data analysis	C	4,00		4,00			GPC-2.AMI, GPC-4.AMI, GPC-5.MAN, GPC-6.MAN, PC-1, UC-2
6	Fundamentals and methodology of programming I	C	3,00	3,00				GPC-2.AMI, GPC-4.AMI, GPC-5.MAN, GPC-6.MAN, PC-2, UC-2
7	Fundamentals and methodology of programming II	C	5,00	5,00				GPC-2.AMI, GPC-4.AMI, GPC-5.MAN, GPC-6.MAN, PC-2, UC-2
8	Computer Architecture and Operating Systems	C	3,00		3,00			GPC-4.AMI, GPC-5.MAN, GPC-6.MAN
9	Linear Algebra and Geometry I	C	4,00	4,00				GPC-1.AMI, GPC-2.MAN, UC-1, UC-2
10	Linear Algebra and Geometry II	C	4,00	4,00				GPC-1.AMI, GPC-2.MAN, UC-1, UC-2
11	Game Theory	C	3,00		3,00			GPC-1.AMI, GPC-3.MAN, UC-2, UC-9
12	Probability Theory and Mathematical Statistics	C	7,00		7,00			GPC-1.AMI, GPC-2.MAN, UC-1
13	Optimization Methods	C	3,00		3,00			GPC-1.AMI, GPC-2.MAN, GPC-3.MAN, UC-1
14	Quantitative Methods for Management Decisions	C	4,00		4,00			GPC-1.AMI, GPC-2.MAN, GPC-3.MAN, UC-9
15	Econometrics	C	6,00			6,00		GPC-1.AMI, GPC-2.MAN, GPC-3.AMI, GPC-5.MAN, GPC-6.MAN, UC-9

16	Discrete Mathematics	C	4,00	4,00				GPC-1.AMI, GPC-2.MAN, UC-1
17	Mathematics.Mathematical Analysis I	C	4,00	4,00				GPC-1.AMI, GPC-2.MAN, UC-1
18	Mathematics.Mathematical Analysis II	C	4,00	4,00				GPC-1.AMI, GPC-2.MAN, UC-1
19	Mathematical analysis III	C	4,00		4,00			GPC-1.AMI, GPC-2.MAN, UC-1
20	Entrepreneurship (offered in a foreign language)	C	3,00		3,00			GPC-1.MAN, GPC-3.MAN, GPC-4.MAN, PC-6, UC-3, UC-5
21	Organizational Behavior	C	3,00		3,00			GPC-1.MAN, GPC-3.MAN, UC-3, UC-5
22	Business ethics and sustainable development	C	3,00	3,00				GPC-1.MAN, GPC-3.MAN, UC-10, UC-11, UC-5
23	Project Management	C	3,00		3,00			GPC-1.MAN, GPC-2.MAN, GPC-3.MAN, GPC-4.AMI, PC-6, UC-1, UC-2, UC-3, UC-5
24	Microeconomics	C	4,00	4,00				GPC-1.MAN, GPC-3.MAN, UC-1, UC-2, UC-9
25	Logistics in the digital economy	C	3,00	3,00				GPC-3.MAN, GPC-4.AMI, PC-5, PC-6, UC-2, UC-3
26	Principles of Accounting	C	3,00		3,00			GPC-1.MAN, GPC-2.MAN, UC-2
27	Human Resource Management	C	3,00			3,00		GPC-1.MAN, GPC-3.MAN, UC-1, UC-3
28	Algorithms and Data Structures	C	3,00	3,00				GPC-1.AMI, GPC-2.MAN, GPC-5.MAN, PC-2
29	General Management	C	3,00	3,00				GPC-1.AMI, GPC-3.AMI, PC-6, UC-3, UC-5
	Elective Professional Block (Major)		85,00	6,00	10,00	42,00	27,00	
1	Управление складскими операциями	C	3,00			3,00		GPC-2.MAN, GPC-3.MAN, PC-5
2	Transportation in Supply Chains	C	3,00			3,00		GPC-2.MAN, GPC-3.MAN, GPC-4.MAN, PC-5
3	Inventory Management	C	3,00			3,00		GPC-2.MAN, GPC-3.MAN, GPC-4.MAN, PC-5
4	Manufacturing Logistics	C	3,00				3,00	GPC-2.MAN, GPC-3.MAN, PC-5
5	Analysis of the reliability and efficiency of logistics operations	C	3,00				3,00	GPC-2.MAN, GPC-3.MAN, PC-5
6	Research Seminar "Design and Reengineering of Supply Chains"	C	3,00				3,00	GPC-2.MAN, GPC-3.MAN, GPC-4.MAN, PC-5
7	Economic Statistics	C	3,00	3,00				GPC-2.MAN, GPC-5.MAN, UC-1, UC-2
8	Managerial Economics	C	3,00	3,00				GPC-1.MAN, GPC-3.MAN, UC-1, UC-2, UC-9
9	Java Programming	C	5,00			5,00		GPC-2.AMI, GPC-5.AMI, GPC-6.MAN, PC-3
10	Logistics of Internet Retailing	C	4,00				4,00	GPC-3.MAN, GPC-4.AMI, GPC-5.AMI, PC-3
11	Machine Learning: Basic Concepts	C	5,00			5,00		GPC-2.AMI, GPC-5.AMI, GPC-6.MAN, PC-3, PC-4
12	Data Analysis	C	5,00			5,00		GPC-1.AMI, GPC-2.MAN, GPC-4.AMI, PC-5, UC-1

13	Product Management (offered in a foreign language)	E	5,00			5,00		GPC-1.MAN, GPC-3.MAN, GPC-4.MAN, PC-6, UC-2, UC-6
14	Digital Product Management (offered in a foreign language)	E	4,00				4,00	GPC-1.MAN, GPC-3.MAN, GPC-4.MAN, PC-6, UC-2, UC-6
15	Project for a business partner I	C	5,00			5,00		GPC-2.AMI, GPC-3.MAN, GPC-4.AMI, GPC-5.MAN, GPC-6.MAN, PC-1, PC-5, PC-6, UC-1, UC-10, UC-11, UC-2, UC-3, UC-4, UC-5, UC-6, UC-9
16	Project for a business partner II	C	4,00				4,00	GPC-2.AMI, GPC-3.MAN, GPC-4.AMI, GPC-5.MAN, GPC-6.MAN, PC-1, PC-5, PC-6, UC-1, UC-10, UC-11, UC-2, UC-3, UC-4, UC-5, UC-6, UC-9
17	Digital platforms and business models	C	4,00		4,00			GPC-4.AMI, GPC-5.MAN, GPC-6.MAN, UC-2, UC-3
18	Supply chain analytics using web services	C	3,00				3,00	GPC-2.MAN, GPC-4.AMI, GPC-5.MAN, GPC-6.MAN, PC-1, PC-3
19	Development of web applications on frameworks	C	5,00			5,00		GPC-4.AMI, GPC-5.AMI, GPC-6.MAN, PC-3, PC-6
20	Marketplace economics	C	3,00		3,00			GPC-1.MAN, GPC-2.MAN, GPC-4.MAN, PC-1
21	Operations and Process Management	C	3,00		3,00			GPC-1.MAN, GPC-2.MAN, GPC-3.MAN, PC-1, PC-4
22	Blockchain platforms	C	3,00				3,00	GPC-3.AMI, GPC-4.AMI, GPC-5.AMI, GPC-6.MAN, PC-3
23	Inventory Optimization Using Machine Learning	C	3,00			3,00		GPC-2.AMI, GPC-3.MAN, GPC-4.AMI, GPC-5.MAN, GPC-6.MAN, PC-2, PC-3, PC-4
	Internship		30,00	1,00	2,00	5,00	22,00	
	Professional Internship		16,00				16,00	
1	Work Experience Internship	C	16,00				16,00	GPC-1.MAN, GPC-2.AMI, GPC-3.AMI, GPC-4.AMI, GPC-5.MAN, PC-1, PC-3, PC-4, PC-5, PC-6
	Project Internship		7,00	1,00	2,00	2,00	2,00	
1	Project "Business case from Ozon"	C	1,00	1,00				GPC-1.AMI, GPC-2.MAN, GPC-5.MAN, PC-6, UC-3, UC-6
2	Consulting project Ozon	C	2,00		2,00			GPC-1.AMI, GPC-2.MAN, GPC-5.MAN, PC-6, UC-3, UC-6
3	Research project from Ozon	C	2,00			2,00		GPC-2.AMI, GPC-3.MAN, GPC-4.AMI, GPC-5.AMI, PC-3, PC-6
4	Project from Ozon "Development of a software product for a platform solution"	C	2,00				2,00	GPC-2.AMI, GPC-3.MAN, GPC-4.AMI, GPC-5.AMI, PC-3, PC-6
	Research Internship		7,00			3,00	4,00	
1	Preparation of Graduation Thesis	C	4,00				4,00	GPC-1.AMI, GPC-2.AMI, GPC-3.AMI, GPC-4.AMI, GPC-5.MAN, GPC-6.MAN, PC-1, PC-2, PC-3, PC-4, PC-5, PC-6, UC-1, UC-2, UC-3, UC-4, UC-5, UC-6

2	Term Paper	C	3,00			3,00		GPC-1.AMI, GPC-2.AMI, GPC-3.AMI, GPC-4.AMI, GPC-5.MAN, GPC-6.MAN, PC-1, PC-2, PC-4, PC-5, PC-6, UC-1, UC-2, UC-3, UC-4, UC-5, UC-6
	General Courses		10,00	5,00	1,00		4,00	
	Core General Courses		2,00	1,00	1,00			
1	Safe Living Basics	C	1,00	1,00				UC-11, UC-8
2	Physical Training	C	1,00		1,00			UC-7
	Optional General Courses		8,00	4,00			4,00	
1	Discipline of the general cycle at the choice of the student	E	4,00				4,00	UC-1, UC-11, UC-5, UC-6
2	Legal Literacy	C	4,00	4,00				UC-1, UC-10, UC-2
	English		1,00				1,00	
	Examinations		1,00				1,00	
1	Independent English Exam	C						UC-4
2	Project Proposal	C	1,00				1,00	GPC-1.AMI, GPC-2.MAN, UC-1, UC-4
3	English Language Integrative Exam	C						UC-4
	Optional Courses							
1	Academic English Writing	O	2,00				2,00	UC-4
2	English Language	O	14,00	8,00	6,00			UC-4
	Data Culture		5,00	4,00		1,00		
1	Independent Programming Test. Advanced Level	C						GPC-2.MAN, GPC-4.AMI, GPC-5.MAN, GPC-6.MAN, PC-1, UC-1
2	External Examinations on Digital Skills. Entry-level	C						GPC-4.AMI
3	External Examinations on Digital Skills. Intermediate Level	C						GPC-4.AMI
4	External Examinations on Digital Skills. Final Level	C						GPC-4.AMI
5	Digital Literacy	C	4,00	4,00				GPC-2.MAN, GPC-4.AMI, GPC-5.MAN, GPC-6.MAN, PC-1, UC-1
6	Independent Data Science Test. Advanced Level	C	1,00			1,00		GPC-2.MAN, GPC-4.AMI, GPC-5.MAN, GPC-6.MAN, PC-1, UC-1
7	Independent Digital Literacy Test	C						GPC-2.MAN, GPC-4.AMI, GPC-5.MAN, GPC-6.MAN, PC-1, UC-1
	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.AMI, GPC-2.AMI, GPC-3.AMI, GPC-4.AMI, GPC-5.AMI, GPC-6.MAN, PC-1, PC-2, PC-3, PC-4, PC-5, PC-6, 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

Фаттахова М.В.

24.05.2022

Dean	LEZINA T.A.	24.05.2022
Deputy Director	KUZMIN P.V.	25.05.2022
Head of Centre for Educational Model Design	LEPESHKIN I.A.	31.05.2022

* Subject type:

Compulsory course	C
Elective course	E
Optional course	O