



National Research University Higher School of Economics (HSE)

Basic Curriculum

Field of study 38.03.01 Economics

Educational Programme "Программа двух дипломов НИУ ВШЭ и РУТ "Экономика и инженерия транспорта""

Implementing unit: Faculty of Urban and Regional Development, HSE - Moscow

Years of Study: 2022/2023 - 2025/2026

Length of Programme: 4 years

Mode of Study: Full Time

Degree: Bachelor's degree

APPROVED  
16.03.2023  
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		148,00	36,00	39,00	39,00	34,00	
	Core Professional Block (Major)		57,00	22,00	18,00	13,00	4,00	
	Subject Areas		57,00	22,00	18,00	13,00	4,00	
1	Calculus	C	9,00	9,00				UC-1, UC-2
2	Linear Algebra	C	7,00	7,00				UC-1, UC-2
3	Microeconomics-1	C	6,00	6,00				GPC-3, UC-9
4	Microeconomics-2	C	6,00		6,00			GPC-3, UC-9
5	Macroeconomics 1	C	6,00		6,00			GPC-3, UC-9
6	Macroeconomics-2	C	6,00			6,00		GPC-3, UC-9
7	Econometrics	C	7,00			7,00		PC-3
8	Mathematical Statistics	C	3,00		3,00			UC-1, UC-2
9	Probability Theory	C	3,00		3,00			UC-1, UC-2
10	Data Analysis	C	2,00				2,00	GPC-2, GPC-3, GPC-5, GPC-6, PC-4, UC-1, UC-2
11	Low Code and Programmed Robots	C	2,00				2,00	GPC-2, GPC-5, GPC-6, PC-4, UC-1
	Elective Professional Block (Major)		91,00	14,00	21,00	26,00	30,00	
	Disciplines of the Degree Programme		34,00	8,00	10,00	16,00		
1	Socio-Economic Geography	C	4,00	4,00				GPC-3
2	Transport Economics	C	8,00		8,00			GPC-1, GPC-4, PC-1, PC-4
3	Logistics and Supply Chain Management	C	2,00		2,00			PC-2, PC-4
4	Methods of Spatial Data Analysis	C	4,00	4,00				PC-2, PC-4
5	Traffic Management and Road Safety	C	6,00			6,00		PC-5, PC-6
6	Urban Public Transport	C	6,00			6,00		PC-5, PC-6
7	Macro Modeling of Traffic Flows	C	4,00			4,00		PC-2, PC-3

	Electives 2nd year (2 out of 4)		6,00		6,00		
1	Geography and Geography of Cities	E	3,00		3,00		GPC-3
2	Economics of Rail Transport	E	3,00		3,00		GPC-1, GPC-4, PC-4
3	Economics of Water Transport	E	3,00		3,00		GPC-1, GPC-4, PC-4
4	Economics of the Air Transport	E	3,00		3,00		GPC-1, GPC-4, PC-4
	Elective Courses 3rd Year (1 out of 2)		4,00			4,00	
1	Basics of Design and Construction of Transport Infrastructure	E	4,00			4,00	PC-5, PC-7
2	Legal Regulation in Transport Planning	E	4,00			4,00	PC-5, PC-7
	Дисциплины по выбору 4 курс		30,00				30,00
	Block 1 (3 out of 6)		18,00				18,00
1	Methods of Spatial Data Analysis. Advanced Level	E	6,00				6,00 PC-2, PC-4
2	Traffic Management and Road Safety. Advanced Level	E	6,00				6,00 PC-5, PC-6
3	Organization and Management of International Cargo Transportation	E	6,00				6,00 PC-2, PC-4
4	Modeling of Technological Processes of Transport and Logistics Systems	E	6,00				6,00 PC-5, PC-6
5	Route Network Planning	E	6,00				6,00 PC-5, PC-6
6	Basics of Intelligent Transport Systems Management	E	6,00				6,00 PC-5, PC-6
	Block 2 (2 out of 4)		12,00				12,00
1	Corporate Finance	E	6,00				6,00 GPC-4, UC-9
2	Leasing and Factoring in the Transport Industry	E	6,00				6,00 GPC-4, UC-9
3	Tax System of Russia	E	6,00				6,00 GPC-4, UC-9
4	Transport Behavior and Transport Choice	E	6,00				6,00 PC-5, PC-6
	Research seminar		17,00	6,00	5,00	6,00	
1	Research Seminar "Introduction to Economic Thinking"	C	3,00	3,00			GPC-3, PC-1
2	Research Seminar "Introduction to Transport Science"	C	3,00	3,00			GPC-3, PC-1
3	Research Seminar "Introduction to Traffic Flow Theory"	C	5,00		5,00		GPC-3, PC-1
4	Research Seminar "Introduction to Spatial and Transport Planning Documents"	C	6,00			6,00	GPC-3, PC-1
	Internship		32,00	3,00	4,00	6,00	19,00
	Professional Internship						
	Project Internship		19,00	3,00	4,00	6,00	6,00
1	Project	C	3,00	3,00			PC-2, PC-7, UC-6
2	Project	C	4,00		4,00		PC-2, PC-7, UC-6
3	Project	C	6,00			6,00	PC-2, PC-7, UC-6
4	Project	C	6,00				6,00 PC-2, PC-7, UC-6
	Research Internship		13,00				13,00
1	Research Internship	C	6,00				6,00 PC-2, PC-7

		C	7,00				7,00	GPC-1, GPC-2, GPC-3, GPC-4, GPC-5, GPC-6, PC-1, PC-2, PC-3, PC-4, PC-5, PC-6, PC-7, UC-1, UC-10, UC-11, UC-2, UC-3, UC-4, UC-5, UC-6, UC-7, UC-8, UC-9
2	Graduation Thesis							
	General Courses		15,00	15,00				
	Core General Courses		9,00	9,00				
1	Basics of Complex Security	C	3,00	3,00				UC-11, UC-8
2	Physical Training	C	3,00	3,00				UC-11, UC-7
3	Legal Culture	C	3,00	3,00				UC-1, UC-10, UC-11
	Core General Elective Courses (2 out of 3)		6,00	6,00				
1	Russia in Global History	E	3,00	3,00				UC-1, UC-10, UC-5
2	Conflict Management	E	3,00	3,00				UC-3
3	Philosophy and Basics of Critical Thinking	E	3,00	3,00				UC-1, UC-3, UC-5
	English		13,00	6,00	4,00		3,00	
	Examinations		1,00				1,00	
1	English Language Test (1st year) (offered in a foreign language)	C						UC-4
2	Independent English Exam (offered in a foreign language)	C						UC-4
3	Project Proposal (offered in a foreign language)	C	1,00				1,00	UC-4
	Optional Courses		12,00	6,00	4,00		2,00	
1	English Language (offered in a foreign language)	C	10,00	6,00	4,00			UC-4
2	Academic English Writing (offered in a foreign language)	C	2,00				2,00	UC-4
	Data Culture		8,00		3,00	5,00		
	Examinations		1,00			1,00		
1	Independent Digital Literacy Test	C						GPC-2, GPC-5, GPC-6
2	Independent Programming Test. Intermediate	C						GPC-2, GPC-5, GPC-6
3	Independent Data Science Test. Intermediate	C	1,00			1,00		GPC-2, GPC-5, GPC-6
	Data Culture Disciplines		7,00		3,00	4,00		
1	Data Scientist with Python	C	3,00		3,00			GPC-2, GPC-5, GPC-6
2	Statistics and Data Analysis in Python	C	4,00			4,00		GPC-2, GPC-5, GPC-6
	Final State Certification (FSC)		4,00				4,00	
	State Examinations							
	Thesis Work		4,00				4,00	
		C	4,00				4,00	GPC-1, GPC-2, GPC-3, GPC-4, GPC-5, GPC-6, PC-1, PC-2, PC-3, PC-4, PC-5, PC-6, PC-7, UC-1, UC-10, UC-11, UC-2, UC-3, UC-4, UC-5, UC-6, UC-7, UC-8, UC-9
1	Presenting of Graduation Thesis							
	Minor		20,00		10,00	10,00		
1	Urban Geography: a Variety of Forms	C	5,00		5,00			GPC-3
2	Urban History: the Evolution of Planning	C	5,00		5,00			GPC-4

3	Urban Sociology: the City and the Citizens	C	5,00			5,00		GPC-5
4	Urban Economics: Authority and Money	C	5,00			5,00		GPC-1, GPC-6

**Curriculum agreed:**

Academic Supervisor	BORISOV A.A.	17.02.2023
Dean	MIKHAILENKO E.K.	17.02.2023
Head of Centre for Educational Model Design	LEPESHKIN I.A.	15.03.2023

\* Subject type:

Compulsory course	C
Elective course	E