

National Research University Higher School of Economics (HSE)

Basic Curriculum

Field of study 38.03.01 Economics

Educational Programme "Double degree programme in Economics of the NRU HSE and the University of London"

Specialization: "Mathematics and Economics"

International College of Economics and Finance, HSE - Moscow

APPROVED by
Vice RectorROSHCHIN Y.S.
08.04.2021

Years of Study: 2020/2021 - 2023/2024

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 (competencies according to the educational standard)
				1	2	3	4	
	Degree Programme		240	60	60	60	60	
	Major		168	31	45	48	44	
	Core Professional Block (Major)		82	31	27	24		
	Subject Areas		82	31	27	24		
	Mathematical Analysis		9	9				
1	Calculus	C	9	9				PC-3, GPC-3, UC-6, UC-4, PC-1, UC-2
	Linear Algebra		3		3			
1	Linear Algebra	C	3		3			UC-6, GPC-3, UC-4, PC-1, PC-3, UC-2
	Probability Theory and Mathematical Statistics		23	9	14			
1	Probability Theory and Statistics	C	9	9				UC-1, PC-3, UC-3, GPC-2, PC-1, UC-4, UC-2, PC-2, GPC-3
2	Statistics	C	7		7			GPC-2, GPC-3, UC-2, UC-4, PC-1, PC-2, UC-1, PC-3, UC-6
3	Principles of Accounting	C	7		7			GPC-2, UC-1, PC-2, PC-4, PC-3, GPC-1, UC-6, UC-4, UC-2
	Microeconomics		20	7	5	8		
1	Introduction to Microeconomics	C	7	7				UC-6, GPC-1, UC-4, UC-2, GPC-3, PC-1, UC-1, PC-2
2	Microeconomics 1	C	5		5			GPC-1, PC-1, GPC-3, PC-2, UC-1, PC-3, UC-6, UC-2, UC-4
3	Microeconomics 2	C	8			8		UC-2, UC-4, GPC-3, PC-1, PC-2, PC-3, UC-1, UC-6, GPC-1
	Macroeconomics		18	6	5	7		
1	Introduction to Macroeconomics	C	6	6				UC-6, PC-2, PC-1, GPC-1, GPC-3, UC-4, UC-1, UC-2

2	Macroeconomics 1	C	5	5		UC-2, PC-2, UC-4, UC-1, GPC-3, PC-3, GPC-1, PC-1, UC-6
3	Macroeconomics 2	C	7		7	PC-3, UC-4, PC-1, PC-2, UC-1, UC-2, GPC-3, GPC-1, UC-6
	Econometrics		9		9	
1	Econometrics	C	9		9	GPC-3, PC-3, GPC-1, PC-1, GPC-2, UC-6, UC-4, UC-1, UC-2
	Elective Professional Block (Major)		86	18	24	44
	Courses of Educational Track "Accounting and Finance"		24		24	
1	Management Accounting	C	8		8	UC-1, UC-6, UC-4, PC-1, UC-2, GPC-1, PC-4, GPC-2
2	Financial Reporting	C	8		8	GPC-3, UC-1, UC-2, GPC-1, GPC-2, UC-4, PC-4, UC-6
3	Asset Pricing and Financial Markets	C	8		8	PC-4, PC-3, GPC-1, UC-6, PC-2, GPC-2, GPC-4, UC-4
	Elective Courses 1-2 Module		4			4
	3rd year courses		4		4	
1	Sociology of Financial Behavior	E	4		4	UC-5, UC-4, UC-6, UC-1, PC-1
2	History of Economic Thought	E	4		4	UC-6, UC-5, PC-1
3	Data Science for Economics	E	4		4	GPC-3, UC-4, PC-3, UC-6, UC-1, UC-2, GPC-2, GPC-1
4	Theory of Finance	E	4		4	UC-4, PC-2, GPC-4, GPC-1, GPC-2, UC-6, PC-3
	4th year courses		4			4
1	Experimental and Behavioural Economics	E	4		4	PC-1, PC-3, PC-4, GPC-1, UC-4, UC-6, UC-1, UC-2
2	Time Series and Panel Data Analysis	E	4		4	UC-2, UC-4, UC-6, GPC-2, PC-2, UC-1, GPC-3, PC-1, PC-3
3	Theory of Finance	E	4		4	GPC-4, UC-6, GPC-2, UC-4, GPC-1, PC-2, PC-3
4	Data Science for Economics	E	4		4	GPC-3, UC-2, GPC-1, UC-1, UC-6, UC-4, GPC-2, PC-3
	Elective Courses 3-4 Module					
1	Development Economics	E	4		4	GPC-2, PC-1, PC-3, UC-4, GPC-1, PC-2, UC-6
2	Game Theory	E	4		4	GPC-1, PC-3, UC-6, PC-2, UC-4, UC-2
3	Economic History	E	4		4	PC-1, UC-6, UC-5
4	Optimization Theory	E	4		4	PC-3, UC-4, UC-6, GPC-3, GPC-1, GPC-2
5	Topics in Applied Economics	E	4		4	PC-2, UC-4, GPC-3, GPC-1, UC-6
6	Contract Theory	E	4		4	UC-4, UC-6, GPC-2, GPC-1, PC-4, GPC-4, PC-1, PC-2
	Elective Courses 2nd Year (1 out of 2)		8	8		
1	Principles of Banking and Finance	E	8	8		UC-6, UC-2, PC-2, UC-4, PC-4, GPC-2, PC-1, UC-1, GPC-1

2	Business and Management in Global Context	E	8		8		UC-4, UC-1, UC-2, GPC-1, PC-2, PC-1, GPC-2, GPC-4, PC-4
Elective Courses 1-4 Module							
1	Management Accounting	E	8		8		PC-4, UC-4, GPC-1, UC-2, GPC-2, UC-6, PC-1, UC-1
2	Asset Pricing and Financial Markets	E	8		8		GPC-2, GPC-4, UC-6, UC-4, GPC-1, PC-4, PC-3, PC-2
3	Organization Theory	E	8		8		PC-3, UC-4, GPC-2, UC-1, GPC-1, PC-2, UC-6, UC-2
4	Financial Intermediation	E	8		8		UC-4, UC-1, GPC-2, GPC-1, UC-2, PC-2
5	Financial Reporting	E	8		8		GPC-3, PC-4, UC-4, GPC-2, UC-1, UC-2, GPC-1, UC-6
Disciplines 4th Year UoL Concentration; 'E', 'E and F', 'E and Manag.', 'Account. And F'			40			40	
1	International Economics	E	10			10	UC-6, GPC-2, PC-1, PC-2, UC-2, UC-4, PC-3, PC-4, UC-1
2	Quantitative Finance	E	10			10	GPC-3, UC-4, PC-3, PC-1, PC-2, UC-2, GPC-2, UC-1, UC-6
3	Investment Portfolio Management	E	10			10	GPC-1, PC-1, UC-1, GPC-4, UC-2, UC-4, PC-2, UC-6, GPC-2, PC-4
4	Core Management Concepts	E	10			10	GPC-1, PC-2, UC-1, UC-2, UC-4, GPC-2, PC-1, GPC-4
5	Machine Learning	E	10			10	GPC-3, PC-3, PC-4, GPC-1, UC-6, UC-2, GPC-2, UC-1, UC-4
6	Monetary Economics	E	10			10	UC-4, PC-1, UC-6, GPC-2, PC-2, PC-4, UC-1, UC-2
7	Auditing and Assurance	E	10			10	GPC-1, UC-1, PC-4, GPC-2, PC-2, UC-2, UC-6, UC-4, PC-1
8	Industrial Economics	E	10			10	PC-3, UC-2, UC-4, PC-1, PC-4, UC-6, GPC-1, UC-1, GPC-2, PC-2
Courses of Educational Track "Economics and Mathematics"							
Core Courses			30		20	10	
1	Abstract Mathematics	C	8		8		GPC-3, PC-1, UC-6, PC-2, UC-2, UC-3, UC-4
2	Game Theory	C	4		4		PC-3, UC-2, GPC-1, PC-2, UC-6, UC-4
3	Further Linear Algebra	C	4		4		UC-2, GPC-3, PC-2, UC-4, UC-6, PC-1
4	Further Calculus	C	4		4		GPC-3, UC-6, PC-1, UC-4, UC-2, PC-2
5	Mathematics of Finance and Valuation	C	5			5	GPC-3, PC-2, UC-6, UC-1, PC-1, UC-4, GPC-2, UC-2, PC-3, PC-4
6	Optimization Theory	C	5			5	GPC-2, GPC-3, PC-2, UC-6, UC-4, PC-1, UC-1, UC-2
Elective Courses UoL (3 out of 4)			30			30	
1	International Economics	E	10			10	GPC-2, UC-6, PC-4, UC-1, PC-2, PC-3, PC-1, UC-2, UC-4

2	Machine Learning	E	10				10	UC-1, UC-2, GPC-1, UC-4, GPC-3, GPC-2, PC-4, PC-3, UC-6
3	Monetary Economics	E	10				10	PC-4, UC-4, PC-1, UC-2, UC-1, UC-6, PC-2, GPC-2
4	Industrial Economics	E	10				10	PC-4, GPC-1, PC-3, UC-6, UC-4, PC-1, UC-1, UC-2, PC-2, GPC-2
	Elective Parts 2nd Year		10		10			
	Disciplines Concentration 'Economics', 'Economics and Finance', 'Economics and Management', 'Banking and Finance', 'Accounting and Finance'		10		10			
1	Mathematics for Economists	C	10		10			UC-4, PC-1, UC-6, UC-2, GPC-3, PC-3
	Courses of Educational Track "Economics and Mathematics"		10		10			
1	Mathematical Methods for Economists	C	10		10			PC-3, GPC-3, UC-2, PC-1, UC-4, UC-6
	Examination weeks, International Programme							
1	Examination Session	C						
	Internship		30		5	12	13	
	Professional Internship		17		5	12		
1	Work Experience Internship	C	7			7		GPC-3, UC-4, GPC-4, PC-1, PC-4, PC-2, GPC-2, GPC-1, PC-3, UC-6
2	Курсовая работа 3 курса	C	5			5		GPC-3, UC-6, GPC-2, PC-4, PC-1, PC-3, UC-4, UC-1, GPC-1, PC-2, UC-2
3	Курсовая работа 2 курса	C	5		5			UC-1, GPC-1, PC-1, PC-4, PC-3, UC-2, PC-2, GPC-3, UC-6, GPC-2, UC-4
	Project Internship		7				7	
1	Preparation of Graduation Thesis	C	7				7	GPC-1, PC-1, UC-3, GPC-4, GPC-2, GPC-3, PC-2, PC-3, PC-4, UC-4, UC-1, UC-2
	Research Internship		6				6	
1	Научно-исследовательская работа	C	6				6	GPC-1, UC-2, UC-6, PC-4, PC-3, GPC-3, UC-1, GPC-2, UC-4
	General Courses		14	7	7			
	Core General Courses		2	1	1			
1	Physical Training	C	1		1			UC-7
2	Safe Living Basics	C	1	1				UC-8
	Optional General Courses		12	6	6			
	Elective Courses		6	6				
1	History of Western Philosophy	E	6	6				UC-1, PC-1, UC-6, UC-5, UC-4, UC-2
2	World Intellectual History	E	6	6				UC-1, UC-5, UC-4, UC-6, UC-2, PC-1
	Elective Courses		3		3			
1	Contemporary Sociology in Global Age 2	E	3		3			PC-1, UC-1, UC-6, UC-5, UC-4
2	Political Science	E	3		3			UC-1, UC-4, PC-1, UC-5, UC-6
3	Principles of Law	E	3		3			PC-1, UC-1, UC-5, UC-6, UC-4
	Elective Courses 1-2 Module		3		3			

1	Contemporary Sociology in Global Age 1	E	3		3		UC-4, UC-5, UC-6, PC-1, UC-1
2	Philosophy and Methodology of Science	E	3		3		UC-6, PC-1, UC-4, UC-1, UC-5
	Minor		21	18	3		
1	English Language	C	18	18			UC-4, UC-6, UC-3
2	English: Extended Essay Writing and Making Presentations	C	3		3		PC-3, UC-4, UC-6, UC-3
	Data Culture		4	4			
	Elective Courses (1 out of 3)		4	4			
1	Information Computer Systems	E	4	4			UC-2, UC-4, PC-3, GPC-1, GPC-2, UC-6, UC-1
2	Programming and Databases	E	4	4			PC-3, UC-6, UC-4, GPC-2, UC-2, GPC-3, UC-1, GPC-1
3	Programming and Data Processing	E	4	4			UC-4, UC-6, GPC-3, PC-3, GPC-1, UC-1, UC-2, GPC-2
	Final State Certification (FSC)		3				3
	Thesis Work		3				3
1	Presenting of Graduation Thesis	C	3				3 GPC-1, PC-2, GPC-3, GPC-4, UC-1, UC-4, GPC-2, UC-3, PC-3, PC-4, UC-2, PC-1, UC-6

Academic Supervisor

ZAMKOV O.O.

30.03.2021

Dean

YAKOVLEV S.M.

30.03.2021

Head of Degree Programmes
Development Office

MAMONOVA M.A.

06.04.2021

* Subject type:

Compulsory course C

Elective course E