



National Research University Higher School of Economics (HSE)

Curriculum

Field of study 05.03.02 Geography

Educational Programme "Geography of Global Changes and
Geoinformation Technology"

Specializations: " Geoinformation Technology and Spatial
Modeling", "Global Environmental and Climate Change",
"Human Geography and Spatial Decisions"

Implementing unit: Faculty of Geography and Geoinformation
Technology, HSE - Moscow

4 th, 2025/2026 academic year

APPROVED

07.05.2025

Vice Rector

ROSHCHIN S.Y.

Signed with EDS

Length of Programme: 4 years

Years of Study: 2022/2023 - 2025/2026

Mode of Study: Full Time

Degree: Bachelor's degree

Block Code	Course	Subject type	Department	Credits	Total Academic Hours	Contact Hours	Allocation of Contact Hours				Additional Information
							1	2	3	4	
	Degree Programme			60,00	2 280	476	138	130	204	4	
	Major			34,00	1 292	436	122	114	200		
	Core Professional Block (Major)			14,00	532	148	36	28	84		
	Disciplines on the basics of physical and social geography			10,00	380	108	36	28	44		
	Disciplines on the basics of physical geography			10,00	380	108	36	28	44		
1	Global Changes and Sustainable Development Strategies	C	Faculty of Geography and Geoinformation Technology	6,00	228	64	36A	28A			
2	Development of Environmental Policies	C	Faculty of Geography and Geoinformation Technology	4,00	152	44			44A		Foreign language
	Disciplines on the basics of digital cartography, geoinformation technologies and remote sensing methods			4,00	152	40			40		
1	Digital Twins and AI in Geography	C	Faculty of Geography and Geoinformation Technology	4,00	152	40			40A		
	Elective Professional Block (Major)			20,00	760	288	86	86	116		
	Дисциплины специализаций			8,00	304	144	58	58	28		
	Геоинформационные технологии и пространственное моделирование			8,00	304	144	58	58	28		
1	3D Analysis and Digital Models	C	Faculty of Geography and Geoinformation Technology	4,00	152	60	30	30A			
2	Spatial Data for Operational Management and Territorial Planning	C	Faculty of Geography and Geoinformation Technology	4,00	152	84	28A	28	28A		
	Глобальные изменения природной среды и климата			8,00	304	140	70	70			

1	Introduction to Climate System Modeling	C	Faculty of Geography and Geoinformation Technology	4,00	152	56	28	28A			
2	AI in Earth Science	C	Faculty of Geography and Geoinformation Technology	4,00	152	84	42	42A			
	Общественная география			8,00	304	128	28	60	40		
1	Spatial Planning	C	Faculty of Geography and Geoinformation Technology	4,00	152	56	28	28A			
2	Regional Policy and Regional Strategies	C	Faculty of Geography and Geoinformation Technology	4,00	152	72		32	40A		
	Общие дисциплины по выбору			8,00	304	100	28	28	44		
	Elective Subjects for the 4th Year			8,00	304	100	28	28	44		
	Block 1			4,00	152	56	28	28			
1	Internet of Things for Environmental Monitoring	E	Faculty of Geography and Geoinformation Technology	4,00	152	56	28	28A			
2	Institutional Economics	E	Department of Applied Economics	4,00	152	54	26	28A			
3	Computer Vision and Machine Learning in Remote Sensing	E	Faculty of Geography and Geoinformation Technology	4,00	152	30	14	16A			
	Block 2			4,00	152	44			44		
1	Web Cartography and Web-GIS	E	Faculty of Geography and Geoinformation Technology	4,00	152	40			40A		
2	Urban Climate Modeling	E	Faculty of Geography and Geoinformation Technology	4,00	152	44			44A		
3	Statistical Methods for Spatial Analysis	E	Faculty of Geography and Geoinformation Technology	4,00	152	44			44A		
	Seminars and Career Guidance Disciplines			4,00	152	44			44		
1	Research Seminar "Science Communications"	C	Faculty of Geography and Geoinformation Technology	4,00	152	44			44A		
	English			1,00	38	2			2		
	Optional Courses										
1	Academic English Writing	O		2,00	76	48		28	20A		Foreign language, Credits only to the cumulative rating
	Examinations			1,00	38	2			2		
1	Project Proposal	C	School of Foreign Languages	1,00	38	2			2A		Foreign language
	Final State Certification (FSC)			7,00	266	2				2	
	Thesis Work			7,00	266	2				2	
1	Presenting of Graduation Thesis	C		7,00	266	2				2A	
	General Courses			4,00	152	30	14	16			
	Optional General Courses			4,00	152	30	14	16			
1	Philosophy	C	Школа философии и культурологии	4,00	152	30	14	16A			Online Course
	Internship			14,00	532	6	2		2	2	
	Research Internship			14,00	532	6	2		2	2	
1	Work Experience Internship	C				2	2A				
2	Preparation of Graduation Thesis	C		7,00	266	2				2A	
3	Graduation Internship	C		7,00	266	2			2A		

Curriculum agreed:

Academic Supervisor	Матасов В.М.	29.03.2025
Dean	KURICHEV N.K.	30.03.2025
Head of Centre for Educational Model Design	LEPESHKIN I.A.	30.04.2025

* Subject type:

Compulsory course

C

Elective course

E

Optional course

O