



National Research University Higher School of Economics (HSE)

Basic Curriculum

Field of study 05.04.02 Geography

Educational Programme "Spatial Data and Applied Geoanalytics"

Trajectories: "Geoanalytics for Making Decision in Business and Government", "Spatial Data Science for Nature and Society Research"

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

Years of Study: 2024/2025 - 2025/2026

Length of Programme: 2 years

Mode of Study: Full Time

Degree: Master's degree / MBA

APPROVED

02.05.2024

Vice Rector

ROSHCHIN S.Y.

Signed with EDS

Block Code	Course	Subject type	Credits	Credits by Years		Planned Educational Programme Development Results
				1	2	
	Degree Programme		120,00	60,00	60,00	
	Geoanalytics for Making Decision in Business and Government (Applied track)		120,00	60,00	60,00	
	Key Seminars		18,00	6,00	12,00	
1	Mentor's Seminar. Geo-Analytics in Business-to-Business and Business-to-Government Management	C	12,00	6,00	6,00	GPC-1.GEO, GPC-2.GEO, GPC-3.GEO, GPC-4.GEO, PC-1, PC-2, PC-3, PC-4, UC-1, UC-2, UC-3, UC-4, UC-5, UC-6
2	Professional Workshop "Project Management in Geoanalytics Field"	C	6,00		6,00	GPC-1.GEO, GPC-2.GEO, GPC-3.GEO, GPC-4.GEO, PC-1, PC-2, PC-3, PC-4, UC-1, UC-2, UC-3, UC-4, UC-5, UC-6
	Internship		36,00	18,00	18,00	
	Project Internship		24,00	6,00	18,00	
1	Applied Project: Geoanalytics Tools for Spatially Oriented Solutions	C	6,00	6,00		GPC-1.GEO, GPC-2.GEO, GPC-3.GEO, GPC-4.GEO, PC-1, PC-2, PC-3, PC-4, UC-1, UC-2, UC-3, UC-4, UC-5, UC-6
2	Preparation of Graduation Thesis	C	18,00		18,00	GPC-1.GEO, GPC-2.GEO, GPC-3.GEO, GPC-4.GEO, PC-1, PC-2, PC-3, PC-4, UC-1, UC-2, UC-3, UC-4, UC-5, UC-6
	Professional Internship		12,00	12,00		
1	Work Experience Internship	C	12,00	12,00		GPC-1.GEO, GPC-2.GEO, GPC-3.GEO, GPC-4.GEO, PC-1, PC-2, PC-3, PC-4, UC-1, UC-2, UC-3, UC-4, UC-5, UC-6
	Research Internship					

	Major		48,00	30,00	18,00	
	Compulsory Courses		48,00	30,00	18,00	
1	GIS Tools for Environmental Management	C	6,00	6,00		GPC-1.GEO, GPC-2.GEO, PC-1, PC-4, UC-1
2	Introduction to the Spatial Data Analysis	C	6,00	6,00		GPC-3.GEO, PC-2, PC-3, UC-1
3	Mathematical Models in Geospatial Studies	C	6,00	6,00		GPC-2.GEO, GPC-3.GEO, PC-2, UC-1
4	Machine Learning in Geospatial Studies	C	6,00	6,00		GPC-1.GEO, GPC-3.GEO, PC-2, PC-3, UC-1
5	Geoanalytics for business and government decision-making systems	C	6,00		6,00	GPC-2.GEO, GPC-4.GEO, PC-1, PC-4, UC-1, UC-2
6	Data-Driven Spatial Planning	C	6,00		6,00	GPC-2.GEO, PC-3, PC-4, UC-1
7	Geospatial Risks: Identification, Adaptation, Prevention	C	6,00		6,00	GPC-2.GEO, GPC-4.GEO, PC-1, PC-3, UC-1, UC-3
8	"Territory Matrix": Relationships between Regional Development Components	C	6,00	6,00		GPC-1.GEO, GPC-2.GEO, PC-1, PC-3, UC-1
	Magolego		12,00	6,00	6,00	
1	All-university Pool MAGOLEGO Courses	C	12,00	6,00	6,00	UC-1, UC-2, UC-3, UC-4, UC-5, UC-6
	Final State Certification (FSC)		6,00		6,00	
1	Final Qualification Paper	C	6,00		6,00	GPC-1.GEO, GPC-2.GEO, GPC-3.GEO, GPC-4.GEO, PC-1, PC-2, PC-3, PC-4, UC-1, UC-2, UC-3, UC-4, UC-5, UC-6
	Spatial Data Science for Nature and Society Research (Research track)		120,00	60,00	60,00	
	Key Seminars		18,00	6,00	12,00	
1	Mentor's Seminar. Spatial Data Science for Studying Nature and Society	C	12,00	6,00	6,00	GPC-1.GEO, GPC-2.GEO, GPC-3.GEO, GPC-4.GEO, PC-1, PC-2, PC-3, PC-4, UC-1, UC-2, UC-3, UC-4, UC-5, UC-6
2	Research Workshop "Spatial Data Science in Studying Nature and Society"	C	6,00		6,00	GPC-1.GEO, GPC-2.GEO, GPC-3.GEO, GPC-4.GEO, PC-1, PC-2, PC-3, PC-4, UC-1, UC-2, UC-3, UC-4, UC-5, UC-6
	Internship		36,00	18,00	18,00	
	Project Internship					
	Professional Internship		12,00	12,00		
1	Science and Research Internship	C	12,00	12,00		GPC-1.GEO, GPC-2.GEO, GPC-3.GEO, GPC-4.GEO, PC-1, PC-2, PC-3, PC-4, UC-1, UC-2, UC-3, UC-4, UC-5, UC-6
	Research Internship		24,00	6,00	18,00	
1	Research project: Data Science Methods in Studying Nature and Society	C	6,00	6,00		GPC-1.GEO, GPC-2.GEO, GPC-3.GEO, GPC-4.GEO, PC-1, PC-2, PC-3, PC-4, UC-1, UC-2, UC-3, UC-4, UC-5, UC-6
2	Preparation of Graduation Thesis	C	18,00		18,00	GPC-1.GEO, GPC-2.GEO, GPC-3.GEO, GPC-4.GEO, PC-1, PC-2, PC-3, PC-4, UC-1, UC-2, UC-3, UC-4, UC-5, UC-6

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4	Machine Learning in Geospatial Studies	C	6,00	6,00		GPC-1.GEO, GPC-3.GEO, PC-2, PC-3, UC-1
5	Geoanalytics for business and government decision-making systems	C	6,00		6,00	GPC-2.GEO, GPC-4.GEO, PC-1, PC-4, UC-1, UC-2
6	Data-Driven Spatial Planning	C	6,00		6,00	GPC-2.GEO, PC-3, PC-4, UC-1
7	Geospatial Risks: Identification, Adaptation, Prevention	C	6,00		6,00	GPC-2.GEO, GPC-4.GEO, PC-3, UC-1, UC-3
8	"Territory Matrix": Relationships between Regional Development Components	C	6,00	6,00		GPC-1.GEO, GPC-2.GEO, PC-1, PC-3, UC-1
	Magolego		12,00	6,00	6,00	
1	All-university Pool MAGOLEGO Courses (offered in a foreign language)	C	12,00	6,00	6,00	UC-1, UC-2, UC-3, UC-4, UC-5, UC-6
	Final State Certification (FSC)		6,00		6,00	
1	Final Qualification Paper	C	6,00		6,00	GPC-1.GEO, GPC-2.GEO, GPC-3.GEO, GPC-4.GEO, PC-1, PC-2, PC-3, PC-4, UC-1, UC-2, UC-3, UC-4, UC-5, UC-6

Curriculum agreed:

Academic Supervisor Aniskina T.A. 26.04.2024

Dean KURICHEV N.K. 26.04.2024

Head of Centre for Educational Model Design LEPESHKIN I.A. 26.04.2024

* Subject type:

Compulsory course C