



National Research University Higher School of Economics (HSE)

Basic Curriculum

Field of study 01.04.02 Applied Mathematics and Informatics

Educational Programme ""

Trajectories: "Artificial Intelligence Technologies in Telecommunications"

Implementing unit: Tikhonov Moscow Institute of Electronics and Mathematics, HSE - Moscow

Years of Study: 2025/2026 - 2026/2027

Length of Programme: 2 years

Mode of Study: Full Time

Degree: Master's degree / MBA

APPROVED

07.05.2025

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	
	Artificial Intelligence Technologies in Telecommunications (Applied track)		120,00	60,00	60,00	
	Key Seminars		18,00	9,00	9,00	
1	Mentor's seminar "Development of an individual educational trajectory and management of professional development"	C	6,00	3,00	3,00	GPC-1.AMI, GPC-2.AMI, GPC-3.AMI, PC-1, PC-4, PC-5, UC-1, UC-4, UC-5, UC-6
2	Research Seminar «Telecommunication Technologies of the Future»	C	6,00	6,00		GPC-1.AMI, GPC-2.AMI, GPC-3.AMI, GPC-4.AMI, PC-1, PC-4, PC-5, UC-1, UC-2, UC-3, UC-4, UC-6
3	Project Seminar	C	6,00		6,00	GPC-1.AMI, GPC-2.AMI, GPC-3.AMI, GPC-4.AMI, PC-1, PC-2, PC-3, PC-4, PC-5, UC-1, UC-2, UC-3, UC-4, UC-5, UC-6
	Internship		24,00	6,00	18,00	
	Free		6,00	6,00		
1	Project «Artificial Intelligence in Telecommunications»	C	6,00	6,00		GPC-1.AMI, GPC-2.AMI, GPC-3.AMI, GPC-4.AMI, PC-1, PC-2, PC-3, PC-4, PC-5, UC-1, UC-2, UC-3, UC-4, UC-5, UC-6
	Preparation of the Graduate Thesis		12,00		12,00	

1	Preparation of Graduation Thesis	C	12,00		12,00	GPC-1.AMI, GPC-2.AMI, GPC-3.AMI, GPC-4.AMI, PC-1, PC-2, PC-3, PC-4, PC-5, UC-1, UC-2, UC-3, UC-4, UC-5, UC-6
	Fixed		6,00		6,00	
1	Work Experience Internship	C	6,00		6,00	GPC-1.AMI, GPC-2.AMI, GPC-3.AMI, GPC-4.AMI, PC-1, PC-2, PC-3, PC-4, PC-5, UC-1, UC-2, UC-3, UC-4, UC-5, UC-6
	Major		66,00	39,00	27,00	
1	Machine Learning and Artificial Intelligence Technologies	C	6,00	6,00		GPC-1.AMI, GPC-4.AMI, PC-1, PC-2, PC-5, UC-1
2	Measurements and Engineering Fundamentals of Telecommunications	C	6,00	6,00		GPC-2.AMI, GPC-3.AMI, GPC-4.AMI, PC-1, PC-2, PC-5, UC-1, UC-2, UC-6
3	Mobile Networks: Standards, Protocols, Architectures	C	6,00	6,00		GPC-3.AMI, GPC-4.AMI, PC-2, PC-3, PC-5, UC-1, UC-2
4	Modeling of 5G Networks	C	6,00	6,00		GPC-2.AMI, GPC-4.AMI, PC-2, PC-5, UC-1, UC-2
5	Security in Mobile Communication Networks	C	6,00	6,00		GPC-1.AMI, GPC-2.AMI, GPC-3.AMI, PC-1, PC-4, UC-1, UC-2, UC-5, UC-6
6	Modeling of 6G Networks	C	6,00	6,00		GPC-3.AMI, GPC-4.AMI, PC-2, PC-3, PC-5, UC-1, UC-2
7	Mathematical Foundations of Machine Learning	C	3,00	3,00		GPC-2.AMI, GPC-3.AMI, GPC-4.AMI, PC-1, PC-2, PC-5, UC-1
8	Information Law	C	6,00		6,00	GPC-3.AMI, PC-3, UC-1, UC-2, UC-3, UC-4
9	Organization Design	C	6,00		6,00	GPC-3.AMI, PC-3, UC-1, UC-2, UC-3, UC-4
10	Digital Transformation Strategies in Telecommunications	C	6,00		6,00	GPC-3.AMI, PC-3, UC-1, UC-2
11	Communication Technologies and Standards of New Generation Communication Networks	C	6,00		6,00	GPC-1.AMI, GPC-2.AMI, GPC-4.AMI, PC-4, PC-5, UC-1, UC-3, UC-4, UC-5, UC-6
12	Mobile Services and Innovations	C	3,00		3,00	GPC-1.AMI, GPC-3.AMI, PC-3, PC-4, UC-1, UC-2, UC-3, UC-4, UC-6
	Magolego		9,00	6,00	3,00	
1	All-university Pool MAGOLEGO Courses	C	9,00	6,00	3,00	GPC-1.AMI, GPC-2.AMI, GPC-3.AMI, GPC-4.AMI, UC-1, UC-2, UC-3, UC-4, UC-5, UC-6
	Final State Certification (FSC)		3,00		3,00	

