



National Research University Higher School of Economics (HSE)

Curriculum

Field of study 11.04.02 Infocommunication Technologies and Systems

Educational Programme "Artificial Intelligence Software and Hardware"

Trajectories: "Artificial Intelligence Software and Hardware"

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

1 st, 2024/2025 academic year

APPROVED

17.04.2024

Vice Rector

ROSHCHIN S.Y.

Signed with EDS

Length of Programme: 2 years

Years of Study: 2024/2025 - 2025/2026

Mode of Study: Full Time

Degree: Master's degree / MBA

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	438	64	94	154	126	
Artificial Intelligence Software and Hardware (Applied track)				60,00	2 280	438	64	94	154	126	
Major				42,00	1 596	420	60	90	150	120	
Elective Courses				6,00	228	60			30	30	
1	Assembler. Linux System Programming	E	School of Electronic Engineering	6,00	228	60			30	30A	
2	Development and Design of Element Base for Hardware and Software Complexes of Artificial Intelligence	E	School of Electronic Engineering	6,00	228	60			30	30A	
Обязательные дисциплины программы				36,00	1 368	360	60	90	120	90	
1	Architecture of Computing Systems and Neuroaccelerators	C	School of Electronic Engineering	6,00	228	60			30	30A	
2	Neural Networks and Machine Learning for Artificial Intelligence Systems	C	School of Electronic Engineering	6,00	228	60	30	30A			
3	Basics of the Statistical Theory of Signal Detection and Pattern Recognition in Artificial Intelligence	C	School of Electronic Engineering	6,00	228	60		30	30A		
4	Programming in C. Algorithms and Data Structures	C	School of Electronic Engineering	6,00	228	60	30	30A			
5	C++ Programming Language	C	School of Electronic Engineering	6,00	228	60			30	30A	
6	Digital Signal Processing for Artificial Intelligence Systems	C	School of Electronic Engineering	6,00	228	60			30	30A	

	Key Seminars			10,00	380	16	4	4	4	4
1	Hardware and Software Systems of Artificial Intelligence (Mentor Seminar)	C	School of Electronic Engineering	10,00	380	16	4A	4	4	4A
	Magolego			3,00	114					
1	All-university Pool MAGOLEGO Courses	E		3,00	114					
	Internship			5,00	190	2				2
	Project Internship			5,00	190	2				2
1	Project	C		5,00	190	2				2A

Curriculum agreed:

Academic Supervisor 03.04.2024

Dean KROUK E.A. 05.04.2024

Head of Centre for Educational Model Design LEPESHKIN I.A. 17.04.2024

* Subject type:

Compulsory course

C

Elective course

E