National Research University Higher School of Economics (HSE)

Curriculum
Field of study 11.04.02 Infocommunication Technologies and Systems
Educational Programme "Internet of Things and Cyber-physical Systems"
Trajectories: "Internet of Things"
Implementing unit: Tikhonov Moscow Institute of Electronics and Mathematics, HSE - Moscow
1 st, 2024/2025 academic year

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**	**444**	**34**	**100**	**172**	**138**	
	Internet of Things (Applied track)			**60,00**	**2 280**	**444**	**34**	**100**	**172**	**138**	
	Major			**39,00**	**1 482**	**352**	**16**	**80**	**146**	**110**	
	Дисциплины по выбору			**3,00**	**114**	**16**		**16**			
1	Product management and economics of IoT/CPS	E	School of Electronic Engineering	3,00	114	30		30A			
2	Managing Distributed IoT Network	E	School of Electronic Engineering	3,00	114	16		16A			
	Обязательные дисциплины программы			**36,00**	**1 368**	**336**	**16**	**64**	**146**	**110**	
1	IoT/CPS Hardware	C	School of Electronic Engineering	6,00	228	60			30	30A	
2	Introduction to IoT/CPS	C	School of Electronic Engineering	3,00	114	16	16A				
3	Sensor Systems	C	School of Electronic Engineering	3,00	114	40		40A			
4	Cyber Security IoT/CPS	C	School of Electronic Engineering	6,00	228	60			30	30A	
5	Ensuring interaction of IoT system elements, interfaces and protocols	C	School of Electronic Engineering	6,00	228	60			30	30A	
6	IoT/CPS software development	C	School of Electronic Engineering	6,00	228	40			20	20A	
7	Network Technologies in Machine-to-Machine (M2M) Communications	C	School of Electronic Engineering	6,00	228	60		24	36A		
	Key Seminars			**9,00**	**342**	**90**	**18**	**20**	**26**	**26**	

1	Internet of Things (mentor workshop)	C	School of Electronic Engineering	6,00	228	24	6	6	6	6A	
2	Project Seminar	C	School of Electronic Engineering	3,00	114	66	12	14	20	20A	
	Magolego			**6,00**	**228**						
1	All-university Pool MAGOLEGO Courses	C		6,00	228						
	Internship			**6,00**	**228**	**2**				**2**	
	Project Internship			**6,00**	**228**	**2**				**2**	
1	Project Activity	C		6,00	228	2				2A	

Curriculum agreed:

Academic Supervisor   IVANOV I.A.   28.02.2024

Dean   KROUK E.A.   01.03.2024

Head of Centre for
 Educational Model Design   LEPESHKIN I.A.   10.04.2024

* Subject type:
Compulsory course   C
Elective course   E