National Research University Higher School of Economics (HSE)

Curriculum

Field of study 11.03.02 Infocommunication Technologies and Systems

Educational Programme "Infocommunication Technologies and Systems"

Specializations: "Electronics of Infocommunication Technologies and Communication Systems", "Info Telecommunication Technologies", "Infocommunication Technologies and Cyber-physical Systems", "Quantum Infocommunication Technologies"

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

3 rd, 2023/2024 academic year

APPROVED

28.04.2023

Vice Rector

ROSHCHIN S.Y.

Signed with EDS

Length of Programme: 4 years
Years of Study: 2021/2022 - 2024/2025
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 Progamme			**60,00**	**1 520**	**689**	**158**	**158**	**189**	**184**	
	Data Culture			**4,00**	**152**	**34**	**16**	**16**		**2**	
1	Independent Programming Test. Intermediate	C	отдел развития цифровых компетенций			2				2A	Online Course
2	Foundations of Computational Methods	C	Department of Applied Mathematics	4,00	152	32	16	16A			Online Course, Foreign language
	Major			**33,00**	**874**	**466**	**104**	**104**	**126**	**132**	
	Elective Professional Block (Major)			**33,00**	**874**	**466**	**104**	**104**	**126**	**132**	
	Блоки дисциплины по выбору			**10,00**		**136**	**28**	**28**	**40**	**40**	
	Infocommunication Technologies and Cyber-physical Systems			**10,00**	**380**	**136**	**28**	**28**	**40**	**40**	
1	IoT hardware design foundamentals	C	School of Electronic Engineering	5,00	190	80			40A	40A	
2	Information and Coding Theories	C	кафедра информационной безопасности киберфизических систем	5,00	190	56	28	28A			
	Info Telecommunication Technologies			**10,00**	**380**	**136**	**28**	**28**	**40**	**40**	
1	Principles of standardization of telecommunication systems	C	School of Electronic Engineering	5,00	190	80			40	40A	
2	Information and Coding Theories	C	кафедра информационной безопасности киберфизических систем	5,00	190	56	28	28A			
	Квантовые технологии инфокоммуникаций			**10,00**	**380**	**124**	**24**	**24**	**38**	**38**	

1	Mathematical methods of physics	C	School of Electronic Engineering	5,00	190	48	24	24A			
2	Physical foudations of quantum phenomena and devices	C	School of Electronic Engineering	5,00	190	76			38	38A	
	Электроника инфокоммуникационных технологий и систем связи			**10,00**	**380**	**188**	**34**	**34**	**64**	**56**	
1	Information Technologies of Telecommunications Devices and Systems Development	C	School of Electronic Engineering	3,00	114	64			64A		
2	Communication Technologies and Systems Modeling Basics	C	School of Electronic Engineering	4,00	152	68	34	34A			
3	Basics of Television and Radiocommunications	C	School of Electronic Engineering	3,00	114	56				56A	
	Дисциплины по выбору ОП			**18,00**	**684**	**248**	**56**	**56**	**64**	**72**	
1	Circuit Engineering of Telecommunication Devices	C	School of Electronic Engineering	4,00	152	56	28	28A			
2	Electronic Devices and Communication Means Physics	C	School of Electronic Engineering	5,00	190	64			28	36A	
3	Digital Signal Processing	C	School of Electronic Engineering	4,00	152	72			36	36A	
4	Electromagnetic Fields and Waves in Contemporary Telecommunications	C	School of Electronic Engineering	5,00	190	56	28A	28A			
	Научно-исследовательские и проектные семинары			**5,00**	**190**	**82**	**20**	**20**	**22**	**20**	
1	Project Seminar	C	School of Electronic Engineering	5,00	190	82	20	20	22	20A	
	Minor			**10,00**		**152**	**38**	**38**	**38**	**38**	
1	Minor	C		10,00		152	38	38A	38	38A	
	English					**3**			**3**		
	Examinations					**3**			**3**		
1	Independent English Exam	C	School of Foreign Languages			3			3A		Foreign language
	General Courses			**4,00**	**152**	**30**			**20**	**10**	
	Optional General Courses			**4,00**	**152**	**30**			**20**	**10**	
1	Legal Literacy	C	департамент права цифровых технологий и биоправа	4,00	152	30			20	10A	Online Course
	Internship			**9,00**	**342**	**4**			**2**	**2**	
	Project Internship			**5,00**	**190**	**2**				**2**	
1	Исследовательский или прикладной проект	C		5,00	190	2				2A	
	Professional Internship			**4,00**	**152**	**2**			**2**		
1	Work Experience Internship	C		4,00	152	2			2A		

Curriculum agreed:

Academic Supervisor ELIZAROV A.A. 06.04.2023

Dean KROUK E.A. 06.04.2023

Head of Centre for Educational Model Design	LEPESHKIN I.A.	28.04.2023

* Subject type:

Compulsory course	C
Optional course	O