



National Research University Higher School of Economics (HSE)

Curriculum

Field of study 03.04.02 Physics

Educational Programme "Physics"

Trajectories: "Physics and Technology of Nanostructures",
"Theoretical Physics"

Implementing unit: St. Petersburg School of Mathematics,
Physics and Computer Science, HSE, HSE - Saint Petersburg
2 nd, 2024/2025 academic year

APPROVED

20.05.2024

Vice Rector

ROSHCHIN S.Y.

Signed with EDS

Length of Programme: 2 years

Years of Study: 2023/2024 - 2024/2025

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	106	52	56	6	6	
	Theoretical Physics (Research track)			60,00	2 280	120	52	56	6	6	
	Major			12,00	456	70	34	36			
	Major			12,00	456	70	34	36			
1	Gauge Theory	C	Department of Physics (at HSE University in St.Petersburg)	6,00	228	40	20	20A			
2	Quantum Transport	C	Department of Physics (at HSE University in St.Petersburg)	6,00	228	30	14	16A			
	Final State Certification (FSC)			3,00	114	2				2	
1	Final Qualification Paper	C		3,00	114	2				2A	
	Key Seminars			9,00	342	36	16	18	2		
1	Research seminar "Additional chapters of theoretical physics"	C	Department of Physics (at HSE University in St.Petersburg)	6,00	228	30	14	16A			
2	Mentor's Seminar	C	Department of Physics (at HSE University in St.Petersburg)	3,00	114	6	2	2	2A		
	Magolego			6,00	228						
1	All-university Pool MAGOLEGO Courses	E		6,00	228						
	Internship			30,00	1 140	12	2	2	4	4	
	Research Internship			21,00	798	6			2	4	
1	Research Internship	C		15,00	570	4			2	2A	

2	Preparation of Final Qualificaiton Paper	C		6,00	228	2				2
Project Internship				9,00	342	6	2	2	2	
1	Project	C		9,00	342	6	2	2	2A	
Physics and Technology of Nanostructures (Research track)				60,00	2 280	110	46	52	6	6
Major				12,00	456	60	28	32		
Major				12,00	456	60	28	32		
1	Quantum Transport	C	Department of Physics (at HSE University in St.Petersburg)	6,00	228	30	14	16A		
2	Technology of semiconductor nanostructures	C	Department of Physics (at HSE University in St.Petersburg)	6,00	228	30	14	16A		
Final State Certification (FSC)				3,00	114	2				2
1	Final Qualification Paper	C		3,00	114	2				2A
Key Seminars				9,00	342	36	16	18	2	
1	Research seminar "Nanostructures and nanomaterials"	C	Department of Physics (at HSE University in St.Petersburg)	6,00	228	30	14	16A		
2	Mentor's Seminar	C	Department of Physics (at HSE University in St.Petersburg)	3,00	114	6	2	2	2A	
Magolego				6,00	228					
1	All-university Pool MAGOLEGO Courses	E		6,00	228					
Internship				30,00	1 140	12	2	2	4	4
Research Internship				21,00	798	6			2	4
1	Research Internship	C		15,00	570	4			2	2A
2	Preparation of Final Qualificaiton Paper	C		6,00	228	2				2
Project Internship				9,00	342	6	2	2	2	
1	Project	C		9,00	342	6	2	2	2A	

Curriculum agreed:

Academic Supervisor	ZHURIKHINA V.V.	27.04.2024
Dean		27.04.2024
Deputy Director	KUZMIN P.V.	27.04.2024
Head of Centre for Educational Model Design	LEPESHKIN I.A.	08.05.2024

* Subject type:

Compulsory course

C

Elective course

E