



National Research University Higher School of Economics (HSE)

Curriculum
 Field of study 03.03.02 Physics
 Educational Programme "Physics"
 Specializations: "Quantum Field Theory", "Solid State Physics"
 Implementing unit: St. Petersburg School of Mathematics,
 Physics and Computer Science, HSE, HSE - Saint Petersburg
 1 st, 2021/2022 academic year

APPROVED
 22.04.2021
 Vice Rector
 ROSHCHIN Y.S.
 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 Programme				60	2 584	1 168	240	214	297	271	
Data Culture				3	114	18	4	4	5	3	
1	Introduction to Python for Data Science	C	Informatics Department	3	114	12	4	4	2A	2A	Online Course
2	Independent Programming Test. Intermediate	C	Center for Support and Monitoring of Degree Programs			3				3A	
3	Independent Digital Literacy Test	C	Center for Support and Monitoring of Degree Programs			3			3A		
Major				47	1 786	754	174	154	226	200	
Core Professional Block (Major)				40	1 520	718	174	154	206	184	
Subject Areas				40	1 520	718	174	154	206	184	
Mathematics				14	532	324	42	36	132	114	
1	Linear Algebra	C	Informatics Department	6	228	136			72A	64A	
2	Calculus	C	Informatics Department	8	304	188	42A	36A	60A	50A	
General Physics				20	760	290	76	70	74	70	
1	Mechanics	C	Department of Physics (at HSE University in St.Petersburg)	10	380	146	76A	70A			
2	Electricity and Magnetism	C	Department of Physics (at HSE University in St.Petersburg)	10	380	144			74A	70A	
Theoretical Physics				6	228	104	56	48			
1	Mathematical Methods in Physics	C	Department of Physics (at HSE University in St.Petersburg)	6	228	104	56	48A			

Elective Professional Block (Major)			7	266	36			20	16		
Научно-исследовательский семинар (НИС)			7	266	36			20	16		
1	Students' research seminar	C	Department of Physics (at HSE University in St.Petersburg)	7	266	36			20	16A	
English				304	146				2		
Optional Courses				304	144						
1	English	O		8	304	144	24	32A	44	44A	Credits only to the cumulative rating
Examinations					2				2		
1	English Language Integrative Exam	C	Department of Foreign Languages			2				2A	
General Courses			10	380	250	62	56	66	66		
Optional General Courses			8	304	60	14	16	14	16		
1	Legal Literacy	C	департамент теории права и межотраслевых юридических дисциплин	4	152	30			14	16A	Online Course
2	Economics	C	Department of Theoretical Economics	4	152	30	14	16A			Online Course
Core General Courses			2	76	190	48	40	52	50		
1	Safe Living Basics	C	отдел развития образовательных программ	1	38	6	6A				Online Course
2	Physical Training	C	Department of Physical Training	1	38	184	42	40A	52	50A	Online Course

Curriculum agreed:

Academic Supervisor	SHENDEROVICH I.E.	05.04.2021
Dean	OMELCHENKO A.V.	05.04.2021
Deputy Director	CHICHERINA N.V.	13.04.2021
Head of Degree Programmes Development Office	MAMONOVA M.A.	20.04.2021

* Subject type:

Compulsory course

C

Elective course

E

Optional course

O