



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
 2 nd, 2022/2023 academic year

APPROVED
 13.05.2022
 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 Programme				60,00	2 280	1 026	282	250	260	234	
Major				50,00	1 900	722	212	178	176	156	
Core Professional Block (Major)				44,00	1 672	694	206	172	168	148	
Subject Areas				44,00	1 672	694	206	172	168	148	
Mathematics				16,00	608	336	112	88	72	64	
1	Differential Equations	C	Informatics Department	3,00	114	52		52A			
2	Linear Algebra	C	Informatics Department	3,00	114	72	36A	36A			
3	Mathematical Physics	C	Department of Physics (at HSE University in St.Petersburg)	4,00	152	72			72A		
4	Calculus	C	Informatics Department	3,00	114	76	76A				
5	Theory of Complex Functions	C	Department of Physics (at HSE University in St.Petersburg)	3,00	114	64				64A	
General Physics				18,00	684	180	54	48	42	36	
1	Optics	C	Department of Physics (at HSE University in St.Petersburg)	9,00	342	78			42A	36A	
2	Thermodynamics and Molecular Physics	C	Department of Physics (at HSE University in St.Petersburg)	9,00	342	102	54A	48A			Online Course
Theoretical Physics				10,00	380	178	40	36	54	48	
1	Analytical Mechanics	C	Department of Physics (at HSE University in St.Petersburg)	4,00	152	76	40	36A			

2	Mechanics of liquids and gases	C	Department of Physics (at HSE University in St.Petersburg)	2,00	76	34			18	16A	
3	Field Theory	C	Department of Physics (at HSE University in St.Petersburg)	4,00	152	68			36	32A	
Elective Professional Block (Major)				6,00	228	28	6	6	8	8	
Научно-исследовательский семинар (НИС)				6,00	228	28	6	6	8	8	
1	Students' research seminar	C	Department of Physics (at HSE University in St.Petersburg)	6,00	228	28	6	6	8	8A	
Minor				10,00	380	120	28	32	32	28	
1	Minor	E		10,00	380	120	28	32A	32	28A	
English											
Optional Courses											
1	English	O		6,00	228	104	28	32A	44		Credits only to the cumulative rating
General Courses						184	42	40	52	50	
Core General Courses						184	42	40	52	50	
1	Physical Training	C	Department of Physical Training			184	42	40A	52	50A	Online Course

Curriculum agreed:

Academic Supervisor	SHENDEROVICH I.E.	05.05.2022
Dean		05.05.2022
Deputy Director	KUZMIN P.V.	12.05.2022
Head of Centre for Educational Model Design	LEPESHKIN I.A.	12.05.2022

* Subject type:

Compulsory course

C

Elective course

E

Optional course

O