



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, 2024/2025 academic year

APPROVED

20.05.2024

Vice Rector

ROSHCHIN S.Y.

Signed with EDS

Length of Programme: 4 years

Years of Study: 2023/2024 - 2026/2027

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	2 442	1 058	290	256	272	240	
Data Culture						4		2		2	
1	External Examinations on Digital Skills. Entry-level	C	отдел развития цифровых компетенций			2		2A			
2	External Examinations on Digital Skills. Intermediate Level	C	отдел развития цифровых компетенций			2				2A	
Major				49,00	1 862	750	220	182	188	160	
Core Professional Block (Major)				44,00	1 672	716	212	174	178	152	
1	Analytical Mechanics	C	Department of Physics (at HSE University in St.Petersburg)	4,00	152	76	40	36A			
2	Differential Equations	C	Informatics Department	3,00	114	52		52A			
3	Linear Algebra	C	Informatics Department	3,00	114	76	40A	36A			
4	Mathematical Physics	C	Department of Physics (at HSE University in St.Petersburg)	5,00	190	68			36A	32A	
5	Calculus 2	C	Informatics Department	3,00	114	76	76A				
6	Optics	C	Department of Physics (at HSE University in St.Petersburg)	9,00	342	126			70A	56A	
7	Theory of Complex Functions	C	Department of Physics (at HSE University in St.Petersburg)	4,00	152	68			36	32A	
8	Thermodynamics and Molecular Physics	C	Department of Physics (at HSE University in St.Petersburg)	9,00	342	106	56A	50A			

9	Electrodynamics	C	Department of Physics (at HSE University in St.Petersburg)	4,00	152	68			36	32A	
Elective Professional Block (Major)				5,00	190	34	8	8	10	8	
Research seminar				5,00	190	34	8	8	10	8	
1	Research Seminar	C	Department of Physics (at HSE University in St.Petersburg)	5,00	190	34	8	8	10	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	32	44A		Foreign language, Credits only to the cumulative rating
General Courses				1,00	200	184	42	40	52	50	
Core General Courses				1,00	200	184	42	40	52	50	
1	Physical Training	C	Department of Physical Training	1,00	200	184	42	40A	52	50A	Online Course

Curriculum agreed:

Academic Supervisor	SHENDEROVICH I.E.	08.05.2024
Dean		08.05.2024
Deputy Director	KUZMIN P.V.	08.05.2024
Head of Centre for Educational Model Design	LEPESHKIN I.A.	14.05.2024

* Subject type:

Compulsory course

C

Elective course

E

Optional course

O