



National Research University Higher School of Economics (HSE)

Curriculum

Field of study 04.04.01 Chemistry

Educational Programme "Chemistry of Molecular Systems and Materials"

Trajectories: "Chemistry of Molecular Systems and Materials"

Implementing unit: Faculty of Chemistry, HSE - Moscow

1 st, 2023/2024 academic year

APPROVED

29.05.2023

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	390	16	64	180	130	
Chemistry of Molecular Systems and Materials (Research track)				60,00	2 280	390	16	64	180	130	
Major				15,00	570	212		12	126	74	
1	Bioinorganic Chemistry	E	Faculty of Chemistry	3,00	114	52	18	34A			
2	Catalysis	E	Faculty of Chemistry	3,00	114	60		30	30A		
3	Medical Inorganic Chemistry	E	Faculty of Chemistry	3,00	114	52			52A		
4	Modern Organometallic Chemistry of Transition Metals	E	Faculty of Chemistry	3,00	114	52			26	26A	
5	Probability Theory, Statistics and Exploratory Data Analysis	C	Department of Big Data and Information Retrieval	3,00	114	12		12A			Online Course, Foreign language
6	Physico-chemical Methods for the Study of Molecular Systems and Materials	C	базовая кафедра элементоорганической химии Института элементоорганических соединений им. А.Н. Несмеянова РАН	6,00	228	96			48	48A	
7	Chemistry of Platinum Group Metals	E	Faculty of Chemistry	3,00	114	40			40A		
8	Solid State Chemistry	E	Faculty of Chemistry	3,00	114	52			26	26A	
Key Seminars				12,00	456	172	16	52	52	52	
Elective Research Seminars				3,00	114	46	10	12	12	12	
1	Research Seminar "Inorganic Chemistry and Materials Science"	E	базовая кафедра неорганической химии и материаловедения Института общей и неорганической химии им. Н.С. Курнакова РАН	3,00	114	46	10	12	12	12A	

2	Research Seminar ""Organic and Organoelement Chemistry"	E	базовая кафедра органической химии Института органической химии им.Н.Д. Зелинского РАН	3,00	114	46	10	12	12	12A	
3	Research Seminar "Chemical Engineering"	E	базовая кафедра физико-химической инженерии ФИЦ проблем химической физики и медицинской химии РАН	3,00	114	46	10	12	12	12A	
Compulsory Research Seminars				9,00	342	126	6	40	40	40	
1	Research Seminar "Modern World Trends in Chemistry and Chemical Technology"	C	базовая кафедра неорганической химии и материаловедения Института общей и неорганической химии им. Н.С. Курнакова РАН	6,00	228	96		32	32	32A	
2	Mentor's Seminar	C	базовая кафедра органической химии Института органической химии им.Н.Д. Зелинского РАН	3,00	114	30	6	8	8	8A	
Magolego				6,00	228						
1	University Pool Courses (MAGO-LEGO)	E		6,00	228						
Internship				27,00	1 026	6			2	4	
Research Internship				27,00	1 026	6			2	4	
1	Writing a Scientific Article	C		9,00	342	2				2A	
2	Research Project	C		3,00	114	2			2A		
3	Work Experience Internship (Research)	C		15,00	570	2				2A	

Curriculum agreed:

Academic Supervisor ROYTERSHTEYN D.M. 25.05.2023

Dean KOTOV V.I. 25.05.2023

Head of Centre for Educational Model Design LEPESHKIN I.A. 26.05.2023

* Subject type:

Compulsory course

C

Elective course

E