



National Research University Higher School of Economics (HSE)

Curriculum

Field of study 01.04.02 Applied Mathematics and Informatics

Educational Programme "Data Science for Construction,
Architecture and Engineering"

Trajectories: "Data Science for Construction, Architecture and
Engineering"

Implementing unit: Faculty of Computer Science, HSE - Moscow
1 st, 2024/2025 academic year

APPROVED

10.04.2024

Vice Rector

ROSHCHIN S.Y.

Signed with EDS

Length of Programme: 2 years

Years of Study: 2024/2025 - 2025/2026

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	514	120	152	104	138	
	(General track)			60,00	2 280	336	84	84	84	84	
	Major			42,00	1 596	532	140	168	112	112	
	The basic part			33,00	1 254	448	112	112	112	112	
1	Introduction to Urban Studies and Urban Planning	C	Department of Big Data and Information Retrieval	6,00	228	56	28	28A			
2	Deep Learning	C	Department of Big Data and Information Retrieval	6,00	228	80			40	40A	
3	Development Cycle and Real Estate Construction	C	Department of Big Data and Information Retrieval	6,00	228	80			40	40A	
4	Data Analysis Tools	C	Department of Big Data and Information Retrieval	6,00	228	56	28	28A			
5	Machine Learning	C	Department of Big Data and Information Retrieval	6,00	228	56	28	28A			
6	Modern Database Architecture	C	Department of Big Data and Information Retrieval	3,00	114	40			40A		
7	Supply Management	C	Department of Big Data and Information Retrieval	3,00	114	40				40A	
	Elective Courses. 1 year			9,00	342	84	28	56			
1	Mathematics for Data Analysis (Linear Algebra)	E	Department of Big Data and Information Retrieval	3,00	114	28		28A			
2	Mathematics for Data Analysis (Mathematical Statistics)	E	Department of Big Data and Information Retrieval	3,00	114	40				40A	
3	Mathematics for Data Analysis (Probability Theory)	E	Department of Big Data and Information Retrieval	3,00	114	40			40A		

4	Project Management	E	Department of Big Data and Information Retrieval	6,00	228	56	28	28A			
5	Legal Regulation in Urban Planning and Management	E	Department of Big Data and Information Retrieval	3,00	114	28		28A			
	Key Seminars			6,00	228	124	16	16	46	46	
1	Mentor's Seminar "Data Science for Construction, Architecture and Engineering"	C	Department of Big Data and Information Retrieval	6,00	228	124	16	16	46	46A	
	Magolego			6,00	228						
1	All-university Pool MAGOLEGO Courses	E		6,00	228						
	Internship			6,00	228	2				2	
	Project Internship			6,00	228	2				2	
1	Course Project	C		6,00	228	2				2A	

Curriculum agreed:

Academic Supervisor	Gordenko M.K.	15.02.2024
Dean	ARZHANTSEV I.V.	15.02.2024
Head of Centre for Educational Model Design	LEPESHKIN I.A.	10.04.2024

* Subject type:

Compulsory course

C

Elective course

E