National Research University Higher School of Economics (HSE)

Curriculum
Field of study 09.04.04 Software Engineering
Educational Programme "Data Engineering"
Trajectories: "Data Engineering"
Implementing unit: Faculty of Computer Science, HSE - Moscow
1 st, 2026/2027 academic year

APPROVED
28.04.2026
Vice Rector
ROSHCHIN S.Y.
Signed with EDS

Length of Programme: 2 years
Years of Study: 2026/2027 - 2027/2028
Mode of Study: Full Time
Degree: Master's degree / MBA

Block Code	Course	Subject type	Department	Period of execution	Credits	Total Academic Hours	Contact Hours	Allocation of Contact Hours				Additional Information
								1	2	3	4	
	Degree Programme				**60,00**	**2 280**	**358**	**60**	**140**	**100**	**58**	
	Data Engineering (Applied track)				**60,00**	**2 280**	**358**	**60**	**140**	**100**	**58**	
	Magolego				**3,00**	**114**						
1	All-university Pool MAGOLEGO Courses	E			3,00	114						
	Key Seminars				**9,00**	**342**	**72**	**24**	**24**	**12**	**12**	
1	Mentor's Seminar	C	Department of Big Data and Information Retrieval		9,00	342	72	24	24A	12	12A	
	Internship				**6,00**	**228**	**2**				**2**	
	Fixed				**6,00**	**228**	**2**				**2**	
1	Work Placement	C		F	6,00	228	2				2	
	Major				**42,00**	**1 596**	**284**	**36**	**116**	**88**	**44**	
1	ETL Processes	C	Department of Big Data and Information Retrieval		6,00	228	48			24	24A	
2	Python for Data Engineering	C	Department of Big Data and Information Retrieval		9,00	342	64	12A	28	24A		
3	SQL: database modeling and management	C	Department of Big Data and Information Retrieval		6,00	228	40	12	28A			
4	Algorithmic Toolbox	C	Department of Big Data and Information Retrieval		6,00	228	40			20	20A	
5	Modern Software Engineering Practices	C	Department of Big Data and Information Retrieval		6,00	228	24	12	12A			
6	NoSQL Databases	C	Department of Big Data and Information Retrieval		6,00	228	40		20	20A		
7	Probability Theory and Mathematical Statistics	C	Department of Big Data and Information Retrieval		3,00	114	28		28A			

Curriculum agreed:

Academic Supervisor KASYANENKO D.A. 27.04.2026

Dean	ARZHANTSEV I.V.	28.04.2026
Head of Centre for Educational Model Design	LEPESHKIN I.A.	28.04.2026

* Subject type:

Compulsory course	C
Elective course	E

Period of execution:

Fixed	F