

No.	COURSE NAME	Hours per semester	ECTS	Form of assignment	SEMESTER 1					SEMESTER 2					SEMESTER 3					SEMESTER 4					SEMESTER 5					SEMESTER 6					SEMESTER 7				
					Form of classes					Form of classes					Form of classes					Form of classes					Form of classes					Form of classes					Form of classes				
					L	C	Lab	P	S	L	C	Lab	P	S	L	C	Lab	P	S	L	C	Lab	P	S	L	C	Lab	P	S	L	C	Lab	P	S	L	C	Lab	P	S
1	English 1	30	2	O																																			
2	English 2	30	2	O																																			
3	English 3	30	2	O																																			
4	English 4	30	2	E																																			
5	Physical Education 1	30	0	Z	30																																		
6	Physical Education 2	30	0	Z						30																													
7	Linear Algebra	60	6	EO	30	30																																	
8	Linear Algebra and Analytic Geometry	60	5	EO						30	30																												
9	Algorithms and Data Structures 1	60	5	EO						30	30																												
10	Algorithms and Data Structures 2	30	2	O											30																								
11	Statistical Data Analysis	60	5	EO																30	30																		
12	Mathematical Analysis 1	90	7	EO	45	45																																	
13	Mathematical Analysis 2	90	7	EO						45	45																												
14	Security of IT Systems and Data Protection	75	6	EOO																30	30	15																	
15	Combinatorial Foundations of Computer Science	75	6	EOO																					30	30	15												
16	Numerical Methods	60	6	EO											30	30																							
17	Data Description Methods	30	3	O	30																																		
18	Optimization Methods	90	7	EOO											30	30	30																						
19	Mathematical Software 1	30	3	O	30																																		
20	Mathematical Software 2	30	3	O																					30														
21	General Purpose Software	30	2	O																																			
22	Foundations of Logic and Quantitative Analysis	60	6	EO	30	30																																	
23	Basics of Programming	60	5	EO	30	30																																	
24	Fundamentals of Management and Entrepreneurship	60	5	EO																					30	30													
25	Object-oriented Programming 1	60	6	EO											30	30																							
26	Object-oriented Programming 2	30	2	O																																			
27	Differential Equations with Applications	75	6	EOO																30	15	30																	
28	Database Systems 1	75	6	EOO											30	15	30																						
29	Database Systems 2	30	2	O																																			
30	Introduction to Graph Theory	60	6	EO						30	30																												
31	Introduction to Probability Theory	75	6	EOO											30	30	15																						
32	Engineering Diploma Project 1	30	3	O																																			
33	Engineering Diploma Project 2	60	13	Z																															60		Z		13

	Hours per semester	ECTS	Form of assignment	SEMESTER 1					SEMESTER 2					SEMESTER 3					SEMESTER 4					SEMESTER 5					SEMESTER 6					SEMESTER 7				
Compulsory subjects module	1725	147	19 E	360	4 E	30	390	4 E	30	330	4 E	28	240	2 E	18	180	3 E	14	105	1 E	9	120	1 E	18														
Specialty - Modelling and Data Analysis	480	43	4 E	0	0 E	0	0	0 E	0	0	0 E	0	120	2 E	12	120	0 E	11	150	2 E	15	90	0 E	5														
Specialty - Design and Operation of Analytical Systems	480	43	4 E	0	0 E	0	0	0 E	0	0	0 E	0	120	2 E	12	120	0 E	11	150	2 E	15	90	0 E	5														
Practices	90	5																																				
<b>Total (specialty - Modelling and Data Analysis)</b>	<b>2205</b>	<b>190</b>	<b>23 E</b>	<b>360</b>	<b>4 E</b>	<b>30</b>	<b>390</b>	<b>4 E</b>	<b>30</b>	<b>330</b>	<b>4 E</b>	<b>28</b>	<b>360</b>	<b>4 E</b>	<b>30</b>	<b>300</b>	<b>3 E</b>	<b>25</b>	<b>255</b>	<b>3 E</b>	<b>24</b>	<b>210</b>	<b>1 E</b>	<b>23</b>														
<b>Total (specialty - Design and Operation of Analytical Systems)</b>	<b>2205</b>	<b>190</b>	<b>23 E</b>	<b>360</b>	<b>4 E</b>	<b>30</b>	<b>390</b>	<b>4 E</b>	<b>30</b>	<b>330</b>	<b>4 E</b>	<b>28</b>	<b>360</b>	<b>4 E</b>	<b>30</b>	<b>300</b>	<b>3 E</b>	<b>25</b>	<b>255</b>	<b>3 E</b>	<b>24</b>	<b>210</b>	<b>1 E</b>	<b>23</b>														
<b>Total without practices</b>	<b>2115</b>	<b>185</b>																																				

Additional subjects offered for degree course: DATA ENGINEERING

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					L	C	Lab	P	S	L	C	Lab	P	S	L	C	Lab	P	S	L	C	Lab	P	S	L	C	Lab	P	S	L	C	Lab	P	S	L	C	Lab	P	S
1	Graph Algorithms	60	6	EO																30	30																		
2	Econometric Models Analysis	60	5	OO																					30	30													
3	Operations Research	60	6	EO																					30	30													
4	Databases in Web Applications 1	60	6	EOO																					30	15	30												
5	Databases in Web Applications 2	30	3	O																										30									
6	Flexible Manufacturing Systems	60	6	EO																					30	30													
7	Information Systems Engineering	60	6	EO																					30	30													
8	LaTeX	30	3	O																																			
9	Financial Mathematics	60	5	EO											30	30																							
10	Computational Methods in Engineering Problems	60	6	EO											30	30																							
11	Engineering Modelling	60	6	EO																					30	30													
12	Modeling of Random Phenomena	60	6	OO																30	30																		
13	Fundamentals of Management and Safety Database Systems	45	5	OO											15	30																							
14	Professional Internship	90	5	O																															90		O		5
15	Quantum Computers Programming	60	5	OO																																			