

Data Science 2020/2021

Name of the course	TOTAL								Semesters																					
	Hours								I						II						III									
		W	C	L	P	S	ECTS	Egz	W	C	L	P	S	ECTS	Egz	W	C	L	P	S	ECTS	Egz	W	C	L	P	S	ECTS	Egz	
General subjects																														
1	Managerial economics	45	15	30	0	0	0	3	0	15	30	0	0	0	3															
2	Psychology and Sociology and Industrial Relations	30	0	30	0	0	0	2	0														0	30	0	0	0	2		
3	Technical and Professional Writing	30	0	30	0	0	0	1	0								0	30	0	0	0	1								
Major courses																														
4	Advanced Programming Technologies	60	30	0	30	0	0	4	1	30	0	30	0	0	4	E														
5	Advanced database technologies	45	15	0	0	30	0	4	1	15	0	0	30	0	4	E														
6	IT Project Management	60	30	0	0	30	0	5	1								30	0	0	30	0	5	E							
7	Parallel and Distributed Programming	60	30	0	15	15	0	5	1								30	0	15	15	0	5	E							
Specialized courses																														
8	Knowledge discovery methods I	75	30	0	0	45	0	5	0	30	0	0	45	0	5															
9	Evolutionary computation	75	30	0	0	45	0	5	0	30	0	0	45	0	5															
10	Statistics and probability	60	30	0	0	30	0	4	1	30	0	0	30	0	4	E														
11	Multimedia data processing amd analysis	60	30	0	0	30	0	5	0	30	0	0	30	0	5															
12	Knowledge discovery methods II	75	30	0	0	45	0	5	0								30	0	0	45	0	5								
13	Experiment Design and Analysis	60	30	0	30	0	0	5	1								30	0	30	0	0	5	E							
14	Methods and Tools for the Analysis of Large Data Sets	60	30	0	0	30	0	5	0								30	0	0	30	0	5								
15	Time series, stock market, economics	60	30	0	0	30	0	4	0								30	0	0	30	0	4								
16	Natural Language Processing	60	30	0	0	30	0	5	1														30	0	0	30	0	5	E	
17	Diploma Seminar	30	0	0	0	0	30	3	0														0	0	0	0	30	3		
18	Preparation of the Diploma Thesis	10	0	0	0	10	0	15	0														0	0	0	10	0	15		
Optional courses 1 (1 of 3)																														
19	Optional course 1	60	30	0	30	0	0	5	0														30	0	30	0	0	5		
Total		1015	420	90	105	370	30	90	7	180	30	30	180	0	30	3	180	30	45	150	0	30	3	60	30	30	40	30	30	1
										420						405						190								

Letter "E" in column "Egz" stands for exam.

W - lecture, C - auditorial exercises, L - laboratories, P - projects, S - seminar

Optional courses 1 (1 of 3)																													
	Advanced optimization methods	60	30	0	30	0	0	5	0															30	0	30	0	0	5
	Neural networks and deep learning	60	30	0	30	0	0	5	0															30	0	30	0	0	5
	Computer Image Processing	60	30	0	30	0	0	5	0															30	0	30	0	0	5