

PLAN OF FULL-TIME STUDIES

Recruitment in the academic year 2022/2023

University of Zielona Góra

Degree course: **DATA ENGINEERING - second-cycle course**

Duration: 3 semesters

Faculty of Mathematics, Computer Science and Econometrics

Course delivery method: **full-time course**

No.	COURSE NAME	Hours per semester	ECTS	Form of assignment	SEMESTER 1								SEMESTER 2								SEMESTER 3											
					Form of classes						Form of assignment	ECTS	Form of classes						Form of assignment	ECTS	Form of classes						Form of assignment	ECTS				
					L	C	Lab	P	S	Pra			L	C	Lab	P	S	Pra			L	C	Lab	P	S	Pra						
1	English 1	30	2	O			30				O	2																				
2	English 2	30	2	E								2			30				E	2												
3	Operation Research and Decision Analysis	60	8	EOO	30	15		15			EOO	8																				
4	Data Security	60	6	EO	30		30				EO	6																				
5	Big Data - Models, Tools, Data Processing	60	7	EO								7	30		30				EO	7												
6	Representation Methods	60	7	EO	30		30				EO	7																				
7	Python for Data Analysts	30	4	OO	15		15				OO	4																				
8	Machine Learning in Python	60	6	EO								6	30		30				EO	6												
9	Diploma Seminar 1	60	5	O								5				60			O	5												
10	Diploma Seminar 2	60	10	Z								10										60			Z	10						
11	Monographic Lecture	30	3	O	30						O	3																				
1	Multidimensional Data Analysis	60	5	EO								5										30	30		EO	5						
2	Text Analysis and Reporting	45	3	OO								3										15	30		OO	3						
3	Methods and Tools for Data Processing with R	60	5	OO								5	30		30				OO	5												
4	Specialist Seminar 1	30	5	O								5				30			O	5												
5	Specialist Seminar 2	30	5	Z								5											30		Z	5						
1	Data Warehouse	60	5	EO								5	30		30				EO	5												
2	Basics of Cloud Computing for WEB Application	60	5	OO								5										30	30		OO	5						
3	Specialist Seminar 1	30	5	O								5				30			O	5												
4	Specialist Seminar 2	30	5	Z								5											30		Z	5						
5	Practical Applications of Data Mining Systems	45	3	OO								3										15	30		OO	3						
1	Decision Analysis and Decision Theory	60	5	EOO								5	30	15		15			EOO	5												
2	Multimedia in Business	45	3	OO								3										30		15	OO	3						
3	Specialist Seminar 1	30	5	O								5				30			O	5												
4	Specialist Seminar 2	30	5	Z								5											30		Z	5						
5	Business Intelligence Systems	60	5	OO								5										30		30	OO	5						

Compulsory subjects module	540	60	#####	270	#####	30	210	#####	20	60	#####	10
Specialty - Data Modelling and Analysis	225	23	#####	0	#####	0	90	#####	10	135	#####	13
Specialty - Data Exploration Systems	225	23	#####	0	#####	0	90	#####	10	135	#####	13
Specialty - Business Analysis	225	23	#####	0	#####	0	90	#####	10	135	#####	13

	Practices	0	0																	
	Total (specialty - Data Modelling and Analysis)	765	83	#####	270	#####	30	300	#####	30	195	#####	23							
	Total (specialty - Data Exploration Systems)	765	83	#####	270	#####	30	300	#####	30	195	#####	23							
	Total (specialty - Business Analysis)	765	83	#####	270	#####	30	300	#####	30	195	#####	23							
Total without practices		765	83																	

Additional subjects offered for degree course: DATA ENGINEERING

No.	COURSE NAME	SEMESTER 1							SEMESTER 2							SEMESTER 3									
		Form of classes						Form of assignment	ECTS	Form of classes						Form of assignment	ECTS	Form of classes						Form of assignment	ECTS
		L	C	Lab	P	S	Pra			L	C	Lab	P	S	Pra			L	C	Lab	P	S	Pra		
1	Multidimensional Data Analysis													30		30					EO	5			
2	Decision Analysis and Decision Theory							30	15		15			EOO	5										
3	Text Analysis and Reporting													15		30					OO	3			
4	LaTeX															30					O	2			
5	Data Warehouse							30		30				EO	5										
6	Methods and Tools for Data Processing with R							30		30				OO	5										
7	Multimedia in Business													30			15				OO	3			
8	Quantum Computing													30		30					OO	5			
9	Basics of Cloud Computing for WEB Application													30		30					OO	5			
10	Specialist Seminar 1											30		O	5										
11	Specialist Seminar 2																	30			Z	5			
12	Business Intelligence Systems													30			30				OO	5			
13	Practical Applications of Data Mining Systems													15		30					OO	3			
1	English for Specific Purposes													30							O	3			
2	Practical Stylistics													30							O	3			
1	Pedagogy 2													30							O	2			
2	Psychology 2													30							O	2			

Recommended:

Resolution No. 17 of the Mathematics Discipline Council of 02 March 2022

Approved by Faculty Education Council at the Faculty of Mathematics, Computer Science and Econometrics:

Resolution no 2 of 03 March 2022