Appendix No. 1a to Resolution No. 748 of the UZ Senate of April 26th, 2023

PLAN OF FULL-TIME STUDIES

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

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

Recruitment in the academic year 2023/2024

Duration: 3 semesters

University of Zielona Góra

Faculty of Mathematics, Computer Science and Econometrics

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	Compulsory subjects module (general, basic and course)	English 1	30	2	O			30				O	2																
2		English 2	30	2	E											30				E	2								
3		Operations 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									30		30				EO	7								
6		Representative Methods	60	7	EO	30		30				EO	7																
7		Python for Data Analysts	30	4	OO	15		15				OO	4																
8		Machine Learning	60	6	EO									30		30				EO	6								
9		Diploma Seminar 1	60	5	O													60		O	5								
10		Diploma Seminar 2	60	10	Z																					60		Z	10
11		Monographic Lecture	30	3	O	30						O	3																
1	Specialty - Modelling and Data Analysis	Multidimensional Data Analysis	60	5	EO																	30		30				EO	5
2		Text Analysis and Reporting	45	3	O																			45				O	3
3		Methods and Tools for Data Processing	60	5	OO									30		30				OO	5								
4		Specialist Seminar 1	30	5	O													30		O	5								
5		Specialist Seminar 2	30	5	Z																					30		Z	5
1	Specialty - Data Exploration Systems	Data Warehouse	60	5	EO									30		30				EO	5								
2		Basics of Cloud Computing for WEB Application	60	5	OO																	30		30				OO	5
3		Specialist Seminar 1	30	5	O													30		O	5								
4		Specialist Seminar 2	30	5	Z																					30		Z	5
5		Practical Applications of Data Mining Systems	45	3	OO																	15		30				OO	3
1	Specialty - Business Analytics	Decision Analysis and Decision Theory	60	5	EOO									30	15		15			EOO	5								
2		Multimedia in Business	45	3	OO																	30			15			OO	3
3		Specialist Seminar 1	30	5	O													30		O	5								
4		Specialist Seminar 2	30	5	Z																					30		Z	5
5		Business Intelligence Systems	60	5	OO																	30			30			OO	5

Compulsory subjects module	540	60	6 E	270	3 E	30	210	3	20	60	0 E	10
Specialty - Modelling and Data Analysis	225	23	1 E	0	0 E	0	90	0	10	135	1 E	13
Specialty - Data Exploration Systems	225	23	1 E	0	0 E	0	90	1	10	135	0 E	13
Specialty - Business Analytics	225	23	1 E	0	0 E	0	90	1	10	135	0 E	13
Practices	0	0										
Total (specialty - Modelling and Data Analysis)	**765**	**83**	**7 E**	**270**	**3 E**	**30**	**300**	**3 E**	**30**	**195**	**1 E**	**23**
Total (specialty - Data Exploration Systems)	**765**	**83**	**7 E**	**270**	**3 E**	**30**	**300**	**4 E**	**30**	**195**	**0 E**	**23**
Total (specialty - Business Analytics)	**765**	**83**	**7 E**	**270**	**3 E**	**30**	**300**	**4 E**	**30**	**195**	**0 E**	**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	ADDITIONAL	Multidimensional Data Analysis																	30		30				EO	5
2		Decision Analysis and Decision Theory									30	15		15			EOO	5								
3		Text Analysis and Reporting																			45				O	3
4		LaTeX																			30				O	2
5		Data Warehouse									30		30				EO	5								
6		Methods and Tools for Data Processing									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	HUMANITIES	English for Specific Purposes																		30					O	3
2		Practical Stylistics																		30					O	3
1	SOCIAL	Pedagogy 2																		30					O	2
2		Psychology 2																		30					O	2

Recommended:

Resolution No. 16 of the Mathematics Discipline Council of 08 March 2023

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

Resolution no 1 of 09 March 2023