PLAN OF FULL-TIME STUDIES

Degree course: COMPUTER SCIENCE AND ECONOMETRICS – first-cycle course

Course delivery method: full-time course

Recruitment in the academic year 2024/2025

Duration: 6 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								SEMESTER 4								SEMESTER 5								SEMESTER 6							
						Form of classes						Form of assignment	ECTS	Form of classes						Form of assignment	ECTS	Form of classes						Form of assignment	ECTS	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			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	O																			30				O	2																								
3		English 3	30	2	O																											30				O	2																
4		English 4	30	2	E																																			30				E	2									
5		Linear Algebra 1	60	6	EO	30	30					EO	6																																								
6		Linear Algebra 2	60	5	EO									30	30					EO	5																																
7		Mathematical Analysis 1	60	6	EO	30	30					EO	6																																								
8		Mathematical Analysis 2	60	5	EO									30	30					EO	5																																
9		Databases 1	75	5	EOO																	30	15	30				EOO	5																								
10		Operations Research 1	60	4	OO																									30	30					OO	4																
11		Operations Research 2	60	4	EO																																	30		30				EO	4								
12		Enterprise Finance	30	5	OO																																									15	15					OO	5
13		Public Finance	15	1	O									15						O	1																																
14		Computer Science in Economics	30	2	O																																									30						O	2
15		Discrete Mathematics 1	60	6	OO									30	30					OO	6																																
16		Mathematical Finance and Actuarial Mathematics	60	4	OO																																	30		30				OO	4								
17		Macroeconomics	45	6	EO									30	15					EO	6																																
18		Microeconomics	45	6	EO	30	15					EO	6																																								
19		Fundamentals of Econometrics	60	4	EOO																																	30	15	15				EOO	4								
20		Law	15	1	O	15						O	1																																								
21		Computer Programming 1	60	6	EO	30		30				EO	6																																								
22		Computer Programming 2	60	5	EO									30		30				EO	5																																
23		Large Scale Software Design	60	4	EO																																	30		30				EO	4								
24		Probability Theory	60	4	EO																	30	30					EO	4																								
25		Accountancy	30	3	OO	15	15					OO	3																																								
26		Mathematical Statistics	60	4	EO																									30	30					EO	4																
27		Descriptive and Economic Statistics	30	2	O																											30				O	2																
28		Diploma Seminar 1	30	3	O																																				30		O	3								
29		Diploma Seminar 2	60	7	Z																																												60		Z	7
30		Information Technology	30	2	O			30				O	2																																								
31		Physical Education 1	30	0	Z		30					Z	0																																								
32		Physical Education 2	30	0	Z										30					Z	0																																
33		Management	45	3	OO																	30	15					OO	3																								
1	Specialty - Business analytics	Economic Analysis of Projects	60	5	OO																																								30		30				OO	5
2		Object-oriented Analysis and Programming in UML	60	5	EO																																								30			30			EO	5
3		Databases Project 1	15	3	O																											15				O	3																
4		Business Plan	30	3	OO																									15		15				OO	3																
5		Dynamic Reporting	60	6	EO																	15		45				EO	6																								
6		Fundamentals of Cryptography	60	6	EO																	30		30				EO	6																								
7		Fundamentals of Management and Safety Database Systems	45	4	OO																																								15		30				OO	4
8		Data Processing and Visualisation	60	5	EO																									30		30				EO	5																
9		Professional Internship	75	3	O																																					75	O	3								
10		Game Theory	60	5	EO																									30	30					EO	5																
1	Specialty - Statistics and econometrics	Databases Project 1	15	3	O																											15				O	3																
2		Quality Control	60	6	EO																																								30		30				EO	6
3		Introduction to Mathematical Modelling	45	6	EO																									15		30				EO	6																
4		Practical Methods of Statistics	60	5	EO																																								30		30				EO	5
5		Professional Internship	75	3	O																																					75	O	3								
6		Mathematical Statistics – Laboratory	30	2	O																											30				O	2																
7		Game Theory	60	5	EO																									30	30					EO	5																
8		Introduction to Actuarial Methods	60	4	OO																																	30	30				OO	4								
9		Introduction to Numerical Methods	60	6	EOO																	30	15	15				EOO	6																								
10		Introduction to Experimental Design	60	5	OO																																								30		30				OO	5
1	Specialty - Information systems	Algorithms and Data Structures	60	5	EO																	30		30				EO	5																								
2		Databases Project 1	15	3	O																											15				O	3																
3		Databases Project 2	30	4	O																																			30			O	4								
4		Databases 2	60	5	EO																									30		30				EO	5																
5		Security of IT Systems	60	5	EO																																								30		30				EO	5
6		Discrete Mathematics 2	60	4	OO																	30	30					OO	4																								
7		Fundamentals of Management and Safety Database Systems	45	4	OO																																								15		30				OO	4
8		Object-oriented Programming 1	60	6	EO																	30		30				EO	6																								
9		Object-oriented Programming 2	60	6	EO																									30		30				EO	6																
10		Professional Internship	75	3	O																																					75	O	3								

Compulsory subjects module	1500	121	15 E	330			4 E	30	360			4 E	30	210			2 E	14	180			1 E	12	300			4 E	21	120			0 E	14
Specialty - Business analytics	525	45	5 E	0			0 E	0	0			0 E	0	120			2 E	12	165			2 E	16	75			0 E	3	165			1 E	14
Specialty - Statistics and econometrics	465	40	5 E	0			0 E	0	0			0 E	0	60			1 E	6	150			2 E	16	135			0 E	7	120			2 E	11
Specialty - Information systems	525	45	5 E	0			0 E	0	0			0 E	0	180			1 E	15	135			2 E	14	105			0 E	7	105			2 E	9
Practices	75	3																																																	
Total (specialty - Business analytics)	**2025**	**166**	**20 E**	**330**			**4 E**	**30**	**360**			**4 E**	**30**	**330**			**4 E**	**26**	**345**			**3 E**	**28**	**375**			**4 E**	**24**	**285**			**1 E**	**28**
Total (specialty - Statistics and econometrics)	**1965**	**161**	**20 E**	**330**			**4 E**	**30**	**360**			**4 E**	**30**	**270**			**3 E**	**20**	**330**			**3 E**	**28**	**435**			**4 E**	**28**	**240**			**2 E**	**25**
Total (specialty - Information systems)	**1965**	**166**	**20 E**	**330**			**4 E**	**30**	**360**			**4 E**	**30**	**390**			**3 E**	**29**	**315**			**3 E**	**26**	**405**			**4 E**	**28**	**225**			**2 E**	**23**

Total without practices	**1950**	**163**

Additional subjects offered for degree course: COMPUTER SCIENCE AND ECONOMETRICS

No.		COURSE NAME	SEMESTER 1								SEMESTER 2								SEMESTER 3								SEMESTER 4								SEMESTER 5								SEMESTER 6							
			Form of classes						Form of assignment	ECTS	Form of classes						Form of assign	ECTS	Form of classes						Form of assign	ECTS	Form of classes						Form of assign	ECTS	Form of classes						Form of assign	ECTS	Form of classes						Form of assign	ECTS
			L	C	Lab	P	S	Pra			L	C	Lab	P	S	Pra			L	C	Lab	P	S	Pra			L	C	Lab	P	S	Pra			L	C	Lab	P	S	Pra			L	C	Lab	P	S	Pra		
1	ADDITIONAL	Algorithms and Data Structures																	30		30				EO	5									30		30				EO	5								
2		Economic Analysis of Projects																																									30		30				OO	5
3		Object-oriented Analysis and Programming in UML																																									30			30			EO	5
4		Web Applications																									30		30				OO	4									30		30				OO	4
5		Databases 2																									30		30				EO	5									30		30				EO	5
6		Databases Project 1																												15			O	3																
7		Databases Project 2																																			30			O	4										
8		Security of IT Systems																																									30		30				EO	5
9		Business Plan																									15			15			OO	3																
10		Dynamic Reporting																	15		45				EO	6																								
11		Quality Control																																									30		30				EO	6
12		LaTeX																			30				O	2											30				O	2								
13		Discrete Mathematics 2																	30	30					OO	4									30	30					OO	4								
14		Probabilistic Methods in Computer Science																									30	30					EO	5									30	30					EO	5
15		Mathematical Software																																											30				O	2
16		Fundamentals of Cryptography																	30		30				EO	6									30		30				EO	6								
17		Introduction to Mathematical Modelling																									15			30			EO	6									15			30			EO	6
18		Basics of Computer Networks																	30		30				OO	5									30		30				OO	5								
19		Basics of Machine Learning																																	30		30				OO	5								
20		Fundamentals of Management and Safety Database Systems																																									15		30				OO	4
21		Practical Methods of Statistics																																									30		30				EO	5
22		Professional Internship																																						75	O	3								
23		Mobile Applications Programming																	30		30				OO	5									30		30				OO	5								
24		Quantum Computing																																									30		30				OO	5
25		Object-oriented Programming 1																	30		30				EO	6									30		30				EO	6								
26		Object-oriented Programming 2																									30		30				EO	6									30		30				EO	6
27		Programming in Statistical Software Packages																																												30			O	3
28		Data Processing and Visualisation																									30		30				EO	5																
29		Mathematical Statistics – Laboratory																											30				O	2											30				O	2
30		Game Theory																									30	30					EO	5																
31		Introduction to Actuarial Methods																																	30	30					OO	4								
32		Introduction to Numerical Methods																	30	15	15				EOO	6																								
33		Introduction to Experimental Design																																									30		30				OO	5
1	HUMANITIES	Polish Language in Practice																		30					O	3										30					O	3								
2		Introductory Course to Thesis Writing and Editing																		30					O	3										30					O	3								

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