

UNIVERSITY "ECONOMICS ACADEMY" BRCKO DISTRICT OF BOSNIA AND HERZEGOVINA
FACULTY OF TECHNICAL SCIENCES
FIRST CYCLE - UNDERGRADUATE ACADEMIC STUDIES
Bachelor of Science in Information Technologies – 240 ECTS

CURRICULUM:

No.	Course Code	Course Title	Sem.	Type	Status	Hours of Active Teaching			ECTS
						L	P	C	
FIRST YEAR									
1.	I01	Mathematics 1	1		M	2	3		7
2.	I02	Informatics	1		M	2	3		7
3.	I03	Management	1		M	2	1		5
4.	I04	Business English 1	1		M	2	2		6
5.	I05	<i>Elective 1</i>	1		E	2	1		5
		Introduction to Programming							
		System Administration							
Total:						10	10		30
6.	I06	Mathematics 2	2		M	2	3		7
7.	I07	Introduction to Economics	2		M	2	3		7
8.	I08	Business Law	2		M	2	1		5
9.	I09	Business English 2	2		M	2	2		6
10.	I10	<i>Elective 2</i>	2		E	2	1		5
		Programming Languages							
		Software Tools							
Total:						10	10		30
Total Hours in the First Year of Undergraduate Academic Studies						300	300		60
SECOND YEAR									
1.	I11	Marketing	3		M	2	3		7
2.	I12	E – Business	3		M	2	3		7
3.	I13	Computer Networks	3		M	2	1		5
4.	I14	Algorithms and Data Structures	3		M	2	2		6
5.	I15	<i>Elective 3</i>	3		E	2	1		5
		Databases							

		Analysis and Data Processing							
Total:						10	10		30
6.	I16	Operating System	4		M	2	3		7
7.	I17	Linear Algebra	4		M	2	3		7
8.	I18	Statistics and Probability	4		M	2	1		5
9.	I19	Object-Oriented Programming	4		M	2	2		6
10.	I20	<i>Elective 4</i>	4		E	2	1		5
		Computer Networks Security							
		Web Applications Development							
Total:						10	10		30
Total Hours in the Second Year of Undergraduate Academic Studies						300	300		60
THIRD YEAR									
1.	I21	Differential Equations	5		M	2	3		7
2.	I22	Pedagogy with Psychology	5		M	2	3		7
3.	I23	Discrete Mathematics	5		M	2	1		5
4.	I24	Software Engineering and Project Management	5		M	2	2		6
5.	I25	<i>Elective 5</i>	5		E	2	1		5
		Mobile Application Development							
		Computer Algebra with Applications							
Total:						10	10		30
6.	I26	Electrical Engineering	6		M	2	3		7
7.	I27	Electronics	6		M	2	3		7
8.	I28	Algorithm Theory	6		M	2	2		5
9.	I29	Multimedia	6		M	2	1		6
10.	I30	<i>Elective 6</i>	6		E	2	1		5
		Design of Information Systems							
		Intelligent Systems							

Total:						10	10		30
Total Hours in the Third Year of Undergraduate Academic Studies						300	300		60
FOURTH YEAR									
1.	I31	Analytical and Geometric Inequalities	7		M	2	3		7
2.	I32	Combinatorics	7		M	2	3		7
3.	I33	Measure of Theory and Integration	7		M	2	1		5
4.	I34	Functional Analysis	7		M	2	2		6
5.	I35	<i>Elective 7</i>	7		E	2	1		5
		Software Project Management							
		Programming Languages							
Total:						10	10		30
6.	I36	Professional Practice	8		E				20
7.	I37	<i>Final Paper</i>	8		E		20		10
Total:						0	20		
Total Hours in the Fourth Year of Undergraduate Academic Studies						150	450		60

A student who defends their final paper after passing all the courses provided by the curriculum for eight semesters, receives the title of engineer of academic studies - Bachelor with honors based on selected elective courses on the selected module - 240 ECTS.