

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

CURRICULUM:

No.	Course Code	Course Title	Sem.	T	Status	Hours of Active Teaching			ECTS
						L	P	KV	
FIRST YEAR									
1.	GR01	Informatics	1		M	2	3		7
2.	GR02	Descriptive Geometry	1		M	2	3		7
3.	GR03	English Language 1	1		M	2	1		5
4.	GR04	Mathematics 1	1		M	2	2		6
5.	GR05	Elective 1	1		E	2	1		5
		Introduction to mining							
		General Mineralogy							
		Technical Physics							
Total:						10	10		30
6.	GR06	Mathematics 2	2		M	2	3		7
7.	GR07	English 2	2		M	2	3		7
8.	GR08	Chemistry	2		M	2	1		5
9.	GR09	Economy in Engineering	2		M	2	2		6
10.	GR10	Elective 2	2		E	2	1		5
		Mineral Deposits							
		General Geology							
		Geodesy							
Total:						10	10		30
Total Hours in the First Year of Undergraduate Academic Studies						300	300		60
SECOND YEAR									
1.	GR11	Strength of Materials	3		M	2	3		7
2.	GR12	Technical Mechanics	3		M	2	3		7
3.	GR13	Statics	3		M	2	1		5
4.	GR14	Fundamentals of Electrical Engineering	3		M	2	2		6
5.	GR15	Elective 3	3		E	2	1		5
		Geomorphology							
		Geoinformation Systems							
		Exploration Drilling							
Total:						10	10		30
6.	GR16	Engineering Graphics and	4		M	2	3		7

		CAD							
7.	GR17	Earthworks	4		M	2	3		7
8.	GR18	Exploitation	4		M	2	1		5
9.	GR19	Land Consolidation	4		M	2	2		6
10.	GR20	<i>Elective 4</i>	4		E	2	1		5
		Fundamentals of Engineering							
		Structural Geology							
		Leveling Calculus							
Total:						10	10		30
Total Hours in the Second Year of Undergraduate Academic Studies						300	300		60
THIRD YEAR									
1.	GR21	Numerical Modeling in Engineering	5		M	2	3		7
2.	GR22	Operational Research and Databases	5		M	2	3		7
3.	GR23	Underground Structures and Tunnels	5		M	2	1		5
4.	GR24	Structural Engineering	5		M	2	2		6
5.	GR25	<i>Elective 5</i>	5		E	2	1		5
		Fundamentals of Environmental engineering							
		Protection and Revitalization of Mining Heritage							
		GPS-Global Navigation Systems							
Total:						10	10		30
6.	GR26	Geomechanics	6		M	2	3		7
7.	GR27	Regulations and Standardization in Engineering	6		M	2	3		7
8.	GR28	System Paleontology	6		M	2	2		5
9.	GR29	Geotechnical Structures	6		M	2	1		6
10.	GR30	<i>Elective 6</i>	6		E	2	1		5
		Mining Ventilation							
		Hydrogeology							
		Fundamentals of Standardization in Geodesy							
Total:						10	10		30
Total Hours in the Third Year of Undergraduate Academic Studies						300	300		60
FOURTH YEAR									
1.	GR31	Mineralogy with Petrology.	7		M	2	3		7

2.	GR32	Optics of Ore Minerals	7		M	2	3		7
3.	GR33	Raw Materials Exploration	7		M	2	1		5
4.	GR34	Flotation and Agglomeration	7		M	2	2		6
5.	GR35	<i>Elective 7</i>	7		E	2	1		5
		Remote Monitoring of Mines							
		Metrology							
		Geodetic Measuring Techniques							
Total:						10	10		30
6.	GR36	Professional Practice	8		M				20
7.	GR37	<i>Final Paper</i>	8		M		20		10
Total:						0	20		30
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 of Science in Geodesy - 240 ECTS.