

UNIVERSITY "ECONOMICS ACADEMY" BRCKO DISTRICT OF BOSNIA AND HERZEGOVINA  
FACULTY OF TECHNICAL SCIENCES  
THIRD CYCLE – DOCTORAL ACADEMIC STUDIES

PhD in Mining Engineering – 180 ECTS

**CURRICULUM:**

No.	Course Code	Course Title	Semester	Course Type	Status	Hours of Active Teaching			ECTS
						L	V	C	
FIRST YEAR									
1.	DGR01	Methodology of Scientific Research Work	1		M	4	2		8
2.	DGR02	Knowledge Management	1		M	4	2		8
3.	DGR03	Elective 1	1		E	2	2		7
		Simulation modeling							
		Models of Quality Management in Logistics							
		Multi-criteria Decision Making in Mining Engineering							
4.	DGR04	Research Work for Topic Selection and Literature Review for Doctoral Dissertation	1		M	0	4		7
Total:						10	10		30
5.	DGR05	Elective 2	2		E	3	1		7
		Geostatistics and GIS							
		Functioning Security of Technical Systems							
		Application of Soft Computing Methods in Mining Engineering							
6.	DGR06	Elective 3	2		E	3	1		7
		Protection and Revitalization of Mining Heritage							
		Digital Methods and Technologies							
		Physical Chemistry of Surface Processes and Environmental Protection							
7.	DGR07	Creation and Publication of the First Scientific Work	2		M	0	6		7

8.	DGR08	Doctoral Dissertation- Topic Research 1	2		M	0	6		9
Total:						6	14		30
Total Hours of Active Teaching in the First Year of Doctoral Academic Studies:						240	360		60
SECOND YEAR									
1.	DGR09	Change Management	3		M	4	2		8
2.	DGR10	<i>Elective 4</i>	3		E	3	1		7
		System Management Theory.							
		Computer Applications in Engineering.							
		Modern Materials							
3.	DGR11	<i>Elective 5</i>	3		E	3	1		7
		Theoretical Principles of Flotation Concentration							
		Management and Optimization of Surface Mining and Landfill Reclamation Processes							
		Modern Geodetic Instruments and Measuring Systems							
4.	DGR12	Doctoral Dissertation – Topic Research 2	3		M	0	6		8
Total:						10	10		30
5.	DGR13	<i>Elective 6</i>	4		E	3	1		7
		Automation of Production Systems							
		Computer Control of Machines and Tools							
		Security and Protection in Mining Technological Systems							
6.	DGR14	Creation and Publication of the Second Scientific Work	4		M	0	6		8
7.	DGR15	Doctoral Dissertation - Topic Research 3	4		M	0	10		15
Total:						3	17		30
Total Hours of Active Teaching in the Second Year of Doctoral Academic Studies:						195	405		60

THIRD YEAR									
1.	DGR16	Doctoral Dissertation – Topic Research 4	5		M	0	10		15
2.	DGR17	Writing a Doctoral Dissertation (Data Processing of a Doctoral Dissertation)	5		M	0	10		15
Total:						0	20		30
3.	DGR18	Creation and Publication of the Third Scientific Work	6		M	0	6		8
4.	DGR19	Doctoral Dissertation – Topic Research 5	6		M	0	6		8
5.	DGR20	Doctoral Dissertation Defense	6		M	0	8		14
Total:						0	20		30
Total Hours of Active Teaching in the Third Year of Doctoral Academic Studies:						0	600		60
Total ECTS									180

A student who defends his/her doctoral dissertation after passing all the subjects provided for in the curriculum for six semesters receives a certificate of completion of the study program with 180 ECTS points, namely PhD in Technical Sciences in the selected module – 180 ECTS