

UNIVERSITY "ECONOMICS ACADEMY" BRCKO DISTRICT OF BOSNIA AND HERZEGOVINA
 FACULTY OF TECHNICAL SCIENCES
 THIRD CYCLE – DOCTORAL ACADEMIC STUDIES
 PhD in Technical Sciences, major in Software Engineering – 180 ECTS

CURRICULUM:

No.	Course Code	Course Title	Semester	Course Type	Status	Hours of Active Teaching			ECTS
						L	V	C	
FIRST YEAR									
1.	DI01	Methodology of Scientific Research Work	1		M	4	2		8
2.	DI02	Knowledge Management	1		M	4	2		8
3.	DI03	<i>Elective 1</i>	1		E	2	2		7
		Simulation Modeling							
		Models of Quality Management in Logistics							
		Virtual and Augmented Reality							
4.	DI04	Research Work for Topic Selection and Literature Review for Doctoral Dissertation	1		M	0	4		7
Total:						10	10		30
5.	DI05	<i>Elective 2</i>	2		E	3	1		7
		Programming Languages							
		Environmental Engineering							
		Business Intelligence							
6.	DI06	<i>Elective 3</i>	2		E	3	1		7
		Microprocessor System Design							
		Digital Methods and Technologies							
		Machine Learning							
7.	DI07	Creation and Publication of the First Scientific Work	2		M	0	6		7
8.	DI08	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.	DI09	Change Management	3		M	4	2		8
2.	DI10	<i>Elective 4</i>	3		E	3	1		7
		Systems Management Theory							
		Information Theory and Coding							
		Congruent Programming							
3.	DI11	<i>Elective 5</i>	3		E	3	1		7
		Descriptive Mathematics							
		Robotics and Automation							
		Internet of Intelligent Devices and Smart Environments							
4.	DI12	Doctoral Dissertation – Topic Research 2	3		M	0	6		8
Total:						10	10		30
5.	DI13	<i>Elective 6</i>	4		E	3	1		7
		Game Theory							
		Intelligent Systems							
		Software Defined Networks							
6.	DI14	Creation and Publication of the Second Scientific Work	4		M	0	6		8
7.	DI15	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.	DI16	Doctoral Dissertation – Topic Research 4	5		M	0	10		15
2.	DI17	Writing a Doctoral Dissertation (Data Processing of a Doctoral Dissertation)	5		M	0	10		15
Total:						0	20		30
3.	DI18	Creation and Publication of the Third Scientific Work	6		M	0	6		8

4.	DI19	Doctoral Dissertation – Topic Research 5	6		M	0	6		8
5.	DI20	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