

UNIVERSITY "ECONOMICS ACADEMY" BRCKO DISTRICT OF BOSNIA AND HERZEGOVINA  
 FACULTY OF EDUCATIONAL SCIENCES  
 THIRD CYCLE – DOCTORAL ACADEMIC STUDIES  
 PhD in Teaching Mathematics and Physics – 180 ECTS

CURRICULUM:

No.	Course Code	Course Title	Semester	Course Type	Status	Hours of Active Teaching			ECTS
						L	P	KV	
<b>FIRST YEAR</b>									
1.	DRMF01	Methodology of Scientific Research Work	1		M	4	2		8
2.	DRMF02	Knowledge Management	1		M	4	2		8
3.	DRMF03	<i>Elective 1</i>	1		E	2	2		7
		Selected Chapters of Discrete Mathematics							
		Classical Differential Geometry							
		Partial and Integral Equations							
4.	DRMF04	Research Work for Topic Selection and Literature Review for Doctoral Dissertation	1		M	0	4		7
<b>Total:</b>						<b>10</b>	<b>10</b>		<b>30</b>
5.	DRMF05	<i>Elective 2</i>	2		E	3	1		7
		Theory of Models							
		Theory of Recursion							
		Non-Euclidean Geometry							
6.	DRMF06	<i>Elective 3</i>	2		E	3	1		7
		Approximation Theory							
		Game Theory 1							
		Operational Research							
7.	DRMF07	Creation and Publication of the First Scientific Work	2		M	0	6		7
8.	DRMF08	Doctoral Dissertation-Topic Research 1	2		M	0	6		9
<b>Total:</b>						<b>6</b>	<b>14</b>		<b>30</b>

<b>Total Hours of Active Teaching in the First Year of Doctoral Academic Studies:</b>						<b>240</b>	<b>360</b>		<b>60</b>
<b>SECOND YEAR</b>									
<b>1.</b>	<b>DRMF09</b>	<b>Change Management</b>	<b>3</b>		<b>M</b>	<b>4</b>	<b>2</b>		<b>8</b>
<b>2.</b>	<b>DRMF10</b>	<i>Elective 4</i>	<b>3</b>		<b>E</b>	<b>3</b>	<b>1</b>		<b>7</b>
		<b>Approximation Theory</b>							
		<b>Game Theory 2</b>							
		<b>Quantum Information and Quantum Mechanics Foundation</b>							
<b>3.</b>	<b>DRMF11</b>	<i>Elective 5</i>	<b>3</b>		<b>E</b>	<b>3</b>	<b>1</b>		<b>7</b>
		<b>Programming in Discrete Mathematics</b>							
		<b>Numerical Analysis Software</b>							
		<b>Quantum Field Theory</b>							
<b>4.</b>	<b>DRMF12</b>	<b>Doctoral Dissertation – Topic Research 2</b>	<b>3</b>		<b>M</b>	<b>0</b>	<b>6</b>		<b>8</b>
<b>Total:</b>						<b>10</b>	<b>10</b>		<b>30</b>
<b>5.</b>	<b>DRMF13</b>	<i>Elective 6</i>	<b>4</b>		<b>E</b>	<b>3</b>	<b>1</b>		<b>7</b>
		<b>Non-standard Analysis</b>							
		<b>Symmetry</b>							
		<b>Special Chapters of Atomic and Molecular Physics</b>							
<b>6.</b>	<b>DRMF14</b>	<b>Creation and Publication of the Second Scientific Work</b>	<b>4</b>		<b>M</b>	<b>0</b>	<b>6</b>		<b>8</b>
<b>7.</b>	<b>DRMF15</b>	<b>Doctoral Dissertation - Topic Research 3</b>	<b>4</b>		<b>M</b>	<b>0</b>	<b>10</b>		<b>15</b>
<b>Total:</b>						<b>3</b>	<b>17</b>		<b>30</b>
<b>Total Hours of Active Teaching in the Second Year of Doctoral Academic Studies:</b>						<b>195</b>	<b>405</b>		<b>60</b>
<b>THIRD YEAR</b>									
<b>1.</b>	<b>DI16</b>	<b>Doctoral Dissertation – Topic Research 4</b>	<b>5</b>		<b>M</b>	<b>0</b>	<b>10</b>		<b>15</b>
<b>2.</b>	<b>DI17</b>	<b>Writing a Doctoral Dissertation (Data Processing of a Doctoral Dissertation)</b>	<b>5</b>		<b>M</b>	<b>0</b>	<b>10</b>		<b>15</b>
<b>Total:</b>						<b>0</b>	<b>20</b>		<b>30</b>

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
<b>Total:</b>						<b>0</b>	<b>20</b>		<b>30</b>
<b>Total Hours of Active Teaching in the Third Year of Doctoral Academic Studies:</b>						<b>0</b>	<b>600</b>		<b>60</b>
<b>Total ECTS</b>									<b>180</b>

**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 the PhD in Educational Sciences in the selected module – 180 ECTS.**