

Approved by  
 RECTOR:  
 (Prof. Dr. Zapryan KOZLUDZHOV)  
 Academic Council Minutes No 18/24.04.2017

**CURRICULUM**

Area of higher education: **PEDAGOGICAL SCIENCES (1)**  
 Professional stream: **PEDAGOGY OF TEACHING (1.3)**  
 Degree programme: **MATHEMATICS AND INFORMATICS**  
 Educational and qualification degree: **BACHELOR**  
 Professional qualification: **TEACHER OF MATHEMATICS, INFORMATICS AND INFORMATION TECHNOLOGY**  
 Mode of study: **FULL-TIME**  
 Official length of programme: **4 YEARS**  
 Dean of FMI: (Prof. Dr. Anton Iliev)  
 Faculty Council Minutes No 17/19.04.2017

<i>Course</i>	<i>CH</i>	<i>L</i>	<i>Lw</i>	<i>S</i>	<i>Sw</i>	<i>LB</i>	<i>LBw</i>	<i>SS</i>	<i>T</i>	<i>C</i>	<i>TAAYTrTn</i>
<b>FIRST ACADEMIC YEAR</b>	<b>620</b>	<b>240</b>	<b>24</b>	<b>260</b>	<b>26</b>	<b>120</b>	<b>12</b>	<b>1180</b>	<b>1800</b>	<b>60</b>	
<i>Autumn trimester</i>	<b>200</b>	<b>90</b>	<b>9</b>	<b>50</b>	<b>5</b>	<b>60</b>	<b>6</b>	<b>400</b>	<b>600</b>	<b>20</b>	
Linear Algebra	60	30	3	30	3	0	0	120	180	6	Ex 1 A 1
Programming	60	30	3	0	0	30	3	150	210	7	Ex 1 A 1
Information Technology	60	30	3	0	0	30	3	120	180	6	Ex 1 A 1
Sport	20	0	0	20	2	0	0	10	30	1	- 1 A 1
<i>Winter trimester</i>	<b>230</b>	<b>90</b>	<b>9</b>	<b>110</b>	<b>11</b>	<b>30</b>	<b>3</b>	<b>430</b>	<b>660</b>	<b>22</b>	
Mathematical Analysis 1	50	30	3	20	2	0	0	100	150	5	Ex 1 W2
Analytical Geometry	60	30	3	30	3	0	0	120	180	6	Ex 1 W2
English	40	0	0	40	4	0	0	80	120	4	- 1 W2
Introduction to Web Programming	60	30	3	0	0	30	3	120	180	6	Ex 1 W2
Sport	20	0	0	20	2	0	0	10	30	1	- 1 W2
<i>Spring trimester</i>	<b>190</b>	<b>60</b>	<b>6</b>	<b>100</b>	<b>10</b>	<b>30</b>	<b>3</b>	<b>350</b>	<b>540</b>	<b>18</b>	
Mathematical Analysis 2	50	30	3	20	2	0	0	100	150	5	Ex 1 S 3
Object-Oriented Programming	60	30	3	0	0	30	3	120	180	6	Ex 1 S 3
English	60	0	0	60	6	0	0	120	180	6	CA1 S 3
Sport	20	0	0	20	2	0	0	10	30	1	CA1 S 3
<b>SECOND ACADEMIC YEAR</b>	<b>650</b>	<b>380</b>	<b>36</b>	<b>230</b>	<b>23</b>	<b>120</b>	<b>12</b>	<b>1150</b>	<b>1800</b>	<b>60</b>	
<i>Autumn trimester</i>	<b>200</b>	<b>120</b>	<b>12</b>	<b>90</b>	<b>9</b>	<b>30</b>	<b>3</b>	<b>400</b>	<b>600</b>	<b>20</b>	
Algebra	60	30	3	30	3	0	0	120	180	6	Ex 2 A 4
Differential Equations	40	20	2	20	2	0	0	80	120	4	CA2 A 4
Algorithms and Data Structures	60	30	3	0	0	30	3	120	180	6	Ex 2 A 4
Electives or Practicals No1	40	40	4	0	0	0	0	80	120	4	CA2 A 4
<i>Winter trimester</i>	<b>230</b>	<b>120</b>	<b>12</b>	<b>50</b>	<b>5</b>	<b>60</b>	<b>6</b>	<b>370</b>	<b>600</b>	<b>20</b>	
Geometry	60	30	3	30	3	0	0	90	150	5	Ex 2 W5
Probability Theory and Mathematical Statistics	60	30	3	20	2	10	1	90	150	5	Ex 2 W5

Web Design	60	30	3	0	0	30	3	90	150	5	CA3	W5
Computer Systems and Communications	50	30	3	0	0	20	2	100	150	5	Ex 2	W5
<b>Spring trimester</b>	<b>220</b>	<b>140</b>	<b>12</b>	<b>90</b>	<b>9</b>	<b>30</b>	<b>3</b>	<b>380</b>	<b>600</b>	<b>20</b>		
Psychology	60	40	2	20	2	0	0	120	180	6	Ex 2	S 6
Discrete Mathematics	60	30	3	30	3	0	0	90	150	5	Ex 2	S 6
Operating Systems	60	30	3	0	0	30	3	90	150	5	Ex 2	S 6
Electives or Practicals No2	40	40	4	0	0	0	0	80	120	4	CA2	S 6
	40	0	0	40	4	0	0					
<b>THIRD ACADEMIC YEAR</b>	<b>650</b>	<b>430</b>	<b>43</b>	<b>260</b>	<b>26</b>	<b>80</b>	<b>8</b>	<b>1330</b>	<b>1980</b>	<b>66</b>		
<b>Autumn trimester</b>	<b>200</b>	<b>140</b>	<b>14</b>	<b>70</b>	<b>7</b>	<b>30</b>	<b>3</b>	<b>400</b>	<b>600</b>	<b>20</b>		
Information Technology in Education	50	30	3	0	0	20	2	100	150	5	Ex 3	A 7
Numerical Methods	50	30	3	10	1	10	1	100	150	5	Ex 3	A 7
Pedagogy	60	40	4	20	2	0	0	120	180	6	Ex 3	A 7
Mandatory Elective or Practical No1 of Group B	40	40	4	0	0	0	0	80	120	4	CA3	A 7
	40	0	0	40	4	0	0					
<b>Winter trimester</b>	<b>210</b>	<b>140</b>	<b>14</b>	<b>90</b>	<b>9</b>	<b>20</b>	<b>2</b>	<b>450</b>	<b>660</b>	<b>22</b>		
School Course in Algebra	50	30	3	20	2	0	0	100	150	5	Ex 3	W8
School Course in Analysis	50	30	3	20	2	0	0	100	150	5	Ex 3	3 8
Methods of Teaching Informatics and Information Technology	40	20	2	0	0	20	2	110	150	5	CA3	W8
Methods of Solving Mathematical Problems	30	20	2	10	1	0	0	60	90	3	Ex 3	W8
Mandatory Elective or Practical No2 of Group B	40	40	4	0	0	0	0	80	120	4	CA3	W8
	40	0	0	40	4	0	0					
<b>Spring trimester</b>	<b>240</b>	<b>150</b>	<b>15.0</b>	<b>100</b>	<b>10</b>	<b>30</b>	<b>3</b>	<b>480</b>	<b>720</b>	<b>24</b>		
Methods of Teaching Mathematics	50	30	3	20	2	0	0	100	150	5	Ex 3	S 9
Complex Analysis	40	20	2	20	2	0	0	80	120	4	CA3	S 9
Databases	60	30	3	0	0	30	3	120	180	6	Ex 3	S 9
School Course in Geometry	50	30	3	20	2	0	0	100	150	5	Ex 3	S 9
Mandatory Elective or Practical No1 of Group A	40	40	4	0	0	0	0	80	120	4	CA3	S 9
	40	0	0	40	4	0	0					
<b>FOURTH ACADEMIC YEAR</b>	<b>540</b>	<b>200</b>	<b>20</b>	<b>40</b>	<b>4</b>	<b>340</b>	<b>34</b>	<b>1710</b>	<b>2250</b>	<b>75</b>		
<b>Autumn trimester</b>	<b>220</b>	<b>90</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>130</b>	<b>13</b>	<b>440</b>	<b>660</b>	<b>22</b>		
Computer Graphics and Presentations	30	20	2	0	0	10	1	60	90	3	Ex 4	A 10
Event Programming	50	20	2	0	0	30	3	100	150	5	Ex 4	A 10
Integrated Practicum in Mathematics	30	0	0	0	0	30	3	60	90	3	CA4	A 10
Inclusive Education	20	20	2	0	0	0	0	40	60	2	CA4	A 10
Lesson Observation in Mathematics	20	0	0	0	0	20	2	40	60	2	CA4	A 10
Lesson Observation in Informatics and Information Technology	20	0	0	0	0	20	2	40	60	2	CA4	A 10
School Informatics	50	30	3	0	0	20	2	100	150	5	Ex 4	A 10
<b>Winter trimester</b>	<b>210</b>	<b>90</b>	<b>9</b>	<b>40</b>	<b>4</b>	<b>120</b>	<b>12</b>	<b>480</b>	<b>690</b>	<b>23</b>		
Information and Communication Technologies in Teaching and Working in a Digital Environment	30	20	2	0	0	10	1	60	90	3	Ex 4	W11
Practice Teaching in Mathematics	30	0	0	0	0	30	3	90	120	4	CA4	W11
Practice Teaching of Informatics and Information Technology	30	0	0	0	0	30	3	90	120	4	CA4	W11
Integrated Practicum in Informatics and Information Technology	30	0	0	0	0	30	3	60	90	3	CA4	W11

School Course in Information Technology	50	30	3	0	0	20	2	100	150	5	Ex 4	W11
Mandatory Elective or Practical No2 of Group A	40	40	4	0	0	0	0	80	120	4	CA4	W11
<b>Spring trimester</b>	<b>110</b>	<b>20</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>90</b>	<b>9</b>	<b>790</b>	<b>900</b>	<b>30</b>		
Pre-Service Teaching of Mathematics	45	0	0	0	0	45	4.5	45	90	3	CA4	S 12
Pre-Service Teaching of Informatics and Information Technology	45	0	0	0	0	45	4.5	45	90	3	CA4	S 12
Preparation for and Taking the Practical and Applied State Examination	0	0	0	0	0	0	0	300	300	10	Ex 4	S 12
Overview Lectures in Mathematics, Informatics and Information Technology	20	20	2	0	0	0	0				4	S 12
Preparation for and Taking the State Examination or Development and Defence of a Thesis Paper	0	0	0	0	0	0	0		400	420	14	Ex
											4	S 12
<b>TOTAL</b>	<b>2460</b>	<b>1250</b>	<b>123</b>	<b>790</b>	<b>79</b>	<b>660</b>	<b>66</b>	<b>5370</b>	<b>7830</b>	<b>261</b>		

**KEY:**

CH – contact hours; L – lectures; Lw – lectures per week; Se – seminars; Sw – seminars per week; LB - labs; LBw - labs per week; SS – self-study; T – total; C – ECTS credits; TA – type of assessment; AY – academic year; Tr – trimester; Tn – trimester number; Ex – exam; CA – continuous assessment; A – Autumn, W – Winter, S – Spring