

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

**CURRICULUM**

Area of higher education: **NATURAL SCIENCES, MATHEMATICS AND INFORMATICS (4)**

Professional stream: **INFORMATICS AND COMPUTER SCIENCE (4.6)**

Degree programme: **SOFTWARE TECHNOLOGY WITH SPECIALIZATION IN SOFTWARE ARCHITECTURES AND TOOLS - 2 years**

Educational and qualification degree: **MASTER**

Professional qualification: **INFORMATICIAN**

Mode of study: **FULL-TIME**

Official length of programme: **2 YEARS**

Dean of FMI:  
 (Prof. Dr. Anton Iliev)  
 Faculty Council Minutes No 17/19.04.2017

**CURRICULUM DETAILS:**

Course	CHL	Lw	S	Sw	L	B	L	B	w	SS	T	C	TAAYTRTn
<b>FIRST ACADEMIC YEAR</b>	<b>300</b>	<b>114</b>	<b>11.4</b>	<b>14.1</b>	<b>41.4</b>	<b>17.2</b>	<b>150</b>	<b>180</b>	<b>060</b>				
<i>Autumn trimester</i>	<i>112</i>	<i>44</i>	<i>4.4</i>	<i>0</i>	<i>0</i>	<i>68</i>	<i>6.8</i>	<i>488</i>	<i>600</i>	<i>20</i>			
Operating Systems	28	16	1.6	0	0	12	1.2	152	180	6	Ex 1	A	1
Data Structures and Programming	42	14	1.4	0	0	28	2.8	168	210	7	Ex 1	A	1
Object-Oriented Programming	42	14	1.4	0	0	28	2.8	168	210	7	Ex 1	A	1
<i>Winter trimester</i>	<i>98</i>	<i>28</i>	<i>2.8</i>	<i>141.4</i>	<i>56</i>	<i>5.6</i>	<i>502</i>	<i>600</i>	<i>20</i>				
Databases	42	14	1.4	0	0	28	2.8	168	210	7	Ex 1	W	2
Discrete Mathematics	28	14	1.4	141.4	0	0	182	210	7	Ex 1	W	2	
Practicals in Java	28	0	0	0	0	28	2.8	152	180	6	CA1	W	2
<i>Spring trimester</i>	<i>90</i>	<i>42</i>	<i>4.2</i>	<i>0</i>	<i>0</i>	<i>48</i>	<i>4.8</i>	<i>510</i>	<i>600</i>	<i>20</i>			
Artificial intelligence	30	14	1.4	0	0	16	1.6	180	210	7	Ex 1	S	3
Software technology	30	14	1.4	0	0	16	1.6	180	210	7	Ex 1	S	3
Computer Networks and Communications	30	14	1.4	0	0	16	1.6	150	180	6	Ex 1	S	3
<b>SECOND ACADEMIC YEAR</b>	<b>310</b>	<b>180</b>	<b>18</b>	<b>0</b>	<b>0</b>	<b>130</b>	<b>13</b>	<b>1490</b>	<b>1800</b>	<b>060</b>			
<i>Autumn trimester</i>	<i>150</i>	<i>60</i>	<i>6</i>	<i>0</i>	<i>0</i>	<i>90</i>	<i>9</i>	<i>450</i>	<i>600</i>	<i>20</i>			
Web Programming Languages and Environments	40	20	2	0	0	20	2	110	150	5	Ex 2	A	1
Integrating Databases into a Web Environment	40	20	2	0	0	20	2	110	150	5	Ex 2	A	1
Programming with Patterns and Frameworks	40	20	2	0	0	20	2	110	150	5	Ex 2	A	1
Practicals	30	0	0	0	0	30	3	120	150	5	CA2	A	1
<i>Winter trimester</i>	<i>90</i>	<i>70</i>	<i>7</i>	<i>0</i>	<i>0</i>	<i>20</i>	<i>2</i>	<i>330</i>	<i>420</i>	<i>14</i>			

Service-Oriented Architectures	20	20	2	0	0	0	0	70	90	3	Ex 2	W 2
Quality and Testable Code	20	20	2	0	0	0	0	70	90	3	Ex 2	W 2
Elective No 1	30	30	3	0	0	0	0	90	120	4	CA2	W 2
Practicals in Real-Life Projects No 1	20	0	0	0	0	20	2	100	120	4	CA2	W 2
<b>Spring trimester</b>	<b>70</b>	<b>50</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>2</b>	<b>710</b>	<b>780</b>	<b>26</b>		
Software Tools	20	20	2	0	0	0	0	70	90	3	Ex 2	S 3
Elective No 2	30	30	3	0	0	0	0	90	120	4	CA2	S 3
Practicals in Real-Life Projects No 2	20	0	0	0	0	20	2	100	120	4	CA2	S 3
Development and Defence of a Thesis Paper or Preparation for and Taking the State Examination	0	0	0	0	0	0	0	450	450	15	Ex 2	S 3
<b>TOTAL</b>	<b>610</b>	<b>294</b>	<b>29.41</b>	<b>41.43</b>	<b>0</b>	<b>230.2</b>	<b>299</b>	<b>036</b>	<b>001</b>	<b>20</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