

**Computational  
Mathematics  
BA Program  
Curriculum**

N	Components	Number of credits	Number of hours	Among them					Distribution of Credits over semesters							
				Lecture	Lab	Practice / lab	Group work	Individual learning	I term	II term	III term	IV term	V term	VI term	VII term	VIII term
1	2	3	4	5	6	7	8	9	10	11	12	14	15	16	17	18
1	History of Georgia (General Course)	3	75	15			15	45	3							
2	Intro to Philosophy	2	50	15			15	20	2							
3	Academic Writing	3	75	5			25	45	3							
4	Psychology	2	50	15			5	30	2							
5	Intro to Mathematics	5	125	30			30	65	5							
6	Intro to Physics	5	125	30			30	65	5							
7	Basics of Programming	5	125	30	30			65	5							
8	Mathematical Analysis I	5	125	30			30	65		5						
9	Mathematical Analysis II	5	125	30			30	65			5					
10	Mathematical Analysis III	5	125	30			30	65				5				
11	Differential Equations	5	125	30			30	65				5				
12	Analytical Geometry I	5	125	30			30	65		5						
13	Analytical Geometry II	5	125	30			30	65			5					
14	Algebra I	5	125	30			30	65		5						
15	Algebra II	5	125	30			30	65			5					
16	Theory of Numbers	5	125	30			15	80			5					
17	Contemporary Geometry	5	125	30			30	65			5					
18	Mathematical Logic	5	125	30			15	80		5						
19	Theory of Probability and mathematical Statistics	5	125	30			15	80				5				
20	Methods of Calculations	5	125	30	15		15	65				5				
21	Statistical Analysis of Data	5	125	15	30			80					5			
22	Methods of Optimization	5	125	30			30	65						5		
23	Mathematical Modeling	5	125	15			30	80							5	
24	Modeling and Simulations	5	125		60			65					5			
25	Data Bases	5	125	30			15	80					5			
26	Management of Information	5	125	15	30			80						5		
27	Basics of Computer	5	125	15	30			80						5		

	network Building															
28	Visual Programming C#	5	125	15	30		80									5
29	Internet Programming	5	125	15			30	80								5
30	VBA –Office Programming	5	125	15	30		80									5
31	English Language A1/B1.1.1	5	125				45	80	5							
32	English Language A2/B1.1.2	5	125				45	80		5						
33	English Language B1.1.1/B1.2.1	5	125				45	80			5					
34	English Language B1.1.2/B1.2.2	5	125				45	80				5				
35	Information Technologies	5	125		45			80		5						
36	Modern Algorithms and Data Structures	5	125	30			30	80				5				
<b>BA paper</b>		<b>10</b>	<b>250</b>				<b>100</b>	<b>150</b>								<b>10</b>
<b>Minor /Elective Course</b>		<b>60</b>	<b>1500</b>				<b>540</b>	<b>960</b>					<b>15</b>	<b>15</b>	<b>15</b>	<b>15</b>
<b>Total</b>		<b>240</b>							<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>