

**Bachelor's Educational Program "Physics"
Curriculum**

№	Components	Course Code	Prerequisite Code	Number of Credits	Number of Hours	Including						Credit distribution within semesters								
						Lecture	Group Work / Practical	Laboratorial	Internship	Midterm Exam	Final Exam	Independent Work	I semester	II semester	III semester	IV semester	V semester	VI semester	VII semester	VIII semester
Compulsory Courses				180	4500	518	812	150	100	31	62	2080	30	30	25	20	10	10	10	15
1	History of Georgia	B1140702003	No	3	75	15	15			1	2	42	3							
2	Introduction to Philosophy	B1140703002	No	2	50	15	15			1	2	17	2							
3	Academic Writing	B1140701001	No	3	75		30			1	2	42	3							
4	Psychology	B1140302055	No	2	50	15	15			1	2	17	2							
5	English A1.1	B1140102073	No	5	125		42			1	2	80	5							
	English A2.1	B1140102002	No																	
	English B1.1	B1140102004	No																	
	English B2.1.1	B1140102014	No																	
6	English A1.2	B1140102074	B1140102073	5	125		42			1	2	80	5							
	English A2.2	B1140102003	B1140102002																	
	English B1.2	B1140102005	B1140102004																	
	English B2.1.2	B1140102015	B1140102014																	
7	English A2.1	B1140102002	B1140102074	5	125		42			1	2	80		5						
	English B1.1	B1140102004	B1140102003																	
	English B2.1.1	B1140102014	B1140102005																	
	English B2.2.1	B1140102071	B1140102015																	
8	English A2.2	B1140102003	B1140102002	5	125		42			1	2	80			5					
	English B1.2	B1140102005	B1140102004																	
	English B2.1.2	B1140102015	B1140102014																	
	English B2.2.2	B1140102072	B1140102071																	
9	Basics of Chemistry	B1140803056	No	5	125	14	15	13		1	2	80		5						
10	Basics of Biology	B11408011126	No	3	75	13	14			1	2	45			3					
11	Basics of Programming	B1140903001	No	5	125	29		28		1	2	65	5							
13	Introduction to Mathematics	B1140902001	No	5	125	30	27			1	2	65	5							
14	Introduction to Mathematical Analysis	B1140902002	No	5	125	27	30			1	2	65		5						
15	Mathematical Analysis	B1140902003	B1140902002	5	125	15	27			1	2	80			5					

16	Algebra	B1140902004	No	5	125	15	27			1	2	80		5					
17	Geometry	B1140902005	No	5	125	15	27			1	2	80		5					
18	Probability and Mathematical Statistics	B1140902006	B1140902002	2	50	15	15			1	2	17			2				
19	Introduction to Physics	B1140901001	No	5	125	30	27			1	2	65	5						
20	Introduction to Electronics	B1140901002	No	5	125	30	27			1	2	65		5					
21	Modeling of Physical Processes	B1140901003	No	5	125	15		27		1	2	80				5			
22	Astronomy	B1140901004	No	5	125	30	12			1	2	80			5				
23	Mechanics	B1140901005	B1140901001 B1140902002	5	125	15	30	17		1	2	60			5				
24	Molecular Physics	B1140901006	B1140901005	5	125	15	27	15		1	2	65				5			
25	Electromagnetism	B1140901007	B1140901002	5	125	15	27	20		1	2	60					5		
26	Optics	B1140901008	B1140901002	5	125	15	27	20		1	2	60						5	
27	Atomic and Nuclear Physics	B1140901009	B1140901008	5	125	15	27	10		1	2	70							5
28	Analytical Mechanics	B1140901010	B1140901005	5	125	30	27			1	2	65				5			
29	Electrodynamics	B1140901011	B1140901002	5	125	30	27			1	2	65					5		
30	Quantum Mechanics	B1140901012	B1140901010	5	125	30	27			1	2	65						5	
31	Statistical Physics	B1140901013	B1140901012	5	125	30	12			1	2	80							5
32	Internship	B1140901014		5	125				100			25							5
33	Bachelor's Thesis	B1140901015		10	250		90			1	2	160							10
Major Elective Courses																			
				30	750														
34	Discipline 1			5	125					1	2	80			5				
35	Discipline 2			5	125					1	2	80				5			
36	Discipline 3			5	125					1	2	80				5			
37	Discipline 4			5	125					1	2	80					5		
38	Discipline 5			5	125					1	2	80						5	
39	Discipline 6			5	125					1	2	80							5
Minor or free components (60 credits)																			
				60	1500	150	150	250	0	12	24	950	0	0	0	0	15	15	15
Total																			
				240	6000	668	962	400	100	43	86	3030	30	30	25	20	25	25	30

Major Elective Courses

	Component	Course Code	Prerequisite Code
1	Plasma Physics	B1140901016	B1140901010
2	Astrophysics	B1140901017	No
3	Radio astronomy	B1140901018	No
4	Cosmology	B1140901019	No
5	Solid-State Physics	B1140901020	No
6	General Electrical Appliances	B1140901021	B1140901002
7	Nanophysics and Innovative Technologies	B1140901022	No
8	Medical Physics with Biophysics	B1140901023	No
9	Applied Radio physics	B1140901024	B1140901007
10	Basics of Applied Biophysics	B1140901025	No
11	Basics of Applied Geophysics	B1140901026	No
12	philosophical Problems of Physics	B1140901027	No
14	Practical Course in Physics I	B1140901028	No
15	Practical Course in Physics II	B1140901029	No
16	Practical Course in Physics III	B1140901030	No
17	Mathematical Tools for Physics I	B1140901031	No
18	Mathematical Tools for Physics II	B1140901032	No
19	physical Basics of Ecology	B1140901033	No
20	Mechanics of Continuous Media	B1140901034	B1140901010
21	Metrology and Radio Measurements	B1140901035	B1140901007
33	Electro-Radio Measurements	B1140901047	No
34	Radiation Security and Dissymmetry	B1140901048	No
35	Theoretical Basics of Radio Techniques	B1140901049	B1140901007
36	Micro World Physics (experiment, theory)	B1140901050	B1140901007
37	Wireless Systems and Organization Principles	B1140901051	No