

Study Plan of the Bachelor of Science Program in Physics

Course ID	Course Title	Credit Hours	Contact Hours	Pre-requisite
First Year: First Term				
11030119	English Language (1)	3	6	---
31041103	Calculus (1)	4	4	---
31011103	General Biology	4	5	---
11010101	Islamic culture (1)	2	2	---
11020204	Health Culture	1	1	---
15011104	Arabic editing	2	2	---
First Year: Second Term				
11030219	English Language (2)	3	6	11030119
31031104	General Physics (1)	4	5	---
31021104	General Chemistry (1)	4	5	---
11020107	Recitation Correction	2	2	---
11010111	Islamic culture (2)	2	2	---
Second Year: First Term				
31031251	General Physics (2)	4	5	31031104
31021253	General Chemistry for physics	3	4	31021104
31031223	Mathematical Physics (1)	3	3	---
31041229	Calculus (2)	3	3	31041103
31031221	Waves and Vibrations	3	4	31031104
31031255	Specialized English Language for physics	2	2	---
11010113	Voluntary Community Service (1)	0	---	---
Second Year: Second Term				
31031252	Alternating Current Circuits	3	4	31031251
31031226	Mathematical Physics (2)	3	3	31031223
31031228	Classical Mechanics (1)	3	3	31031223
31031254	Electromagnetism	3	3	31031251
31031256	Thermodynamics	2	2	31031104
31031258	Physical Optics	3	4	31031221
11010123	Voluntary Community Service (2)	0	---	---
Third Year: First Term				
31031321	Mathematical Physics (3)	3	3	31031226
31031325	Classical Mechanics (2)	3	3	31031228
31031351	Electronics (1)	3	4	31031251
31031323	Scientific Programming	3	4	31031226

31031353	Modern Physics	3	4	31031251
31031329	Statistical Physics	3	3	31031256
Third Year: Second Term				
31031324	Solid State Physics (1)	3	4	31031251
31031326	Quantum Mechanics (1)	3	3	31031325
31031330	Nuclear Physics (1)	3	4	31031353
31031352	Computational Physics	3	4	31031323
31031354	Electronics (2)	3	4	31031351
31031356	Electrodynamics	3	3	31031254
Fourth Year: First Term				
31031451	Atomic Physics	3	3	31031353
31031429	Solid State Physics (2)	3	4	31031324
11010112	Research and Essay Writing Skills	2	2	---
31031453	Radiation Physics	2	2	31031330
31031455	Introduction to Plasma Physics	2	2	31031356
	Elective (1)	2	2	---
31031463	Graduation Research	3	3	Completion of 85 Credit hrs
Fourth Year: Second Term				
31031452	Nuclear Physics (2)	3	4	31031330
31031454	Laser Physics	2	2	31031451
31031456	Semiconductors Physics	3	4	31031429
31031458	Quantum Mechanics (2)	3	3	31031326
	Elective (2)	2	2	---
31031460	Molecular Spectroscopy	2	2	31031451
31031462	Materials Physics	2	2	31031429
Electives				
Elective (1)				
31031457	Biophysics	2	2	31031251
31031459	Physics of Thin Films	2	2	31031324
31031461	Advanced Laboratory	2	2	31031324
Elective (2)				
31031464	Nanostructures	2	2	31031429
31031466	Elementary Particles	2	2	31031330
31031468	Physics of Renewable Energy	2	2	31031429