

## Study Plan of the Program of Physics

Course ID	Course Title	Credit Hours	Contact Hours	Pre-requisite
<b>First Year: First Term</b>				
11.3.119	English language (1)	3	6	
18.1.1.2	General Biology	4	0	
18.4.1.2	Calculus (1)	4	4	
18.9.10.1	Arabic editing	2	2	
11.2.2.4	Health Culture	1	1	
11.1.1.1	Islamic culture (1)	2	2	
<b>First Year: Second Term</b>				
11.3.219	English language (2)	3	6	English language (1)
18.3.1.2	General Physics (1)	4	0	
18.112.0	General Chemistry (1)	4	0	
11.1.111	Islamic Culture (2)	2	2	
11.2.1.7	Correcting recitation	2	2	
<b>Second Year: First Term</b>				
18.312.7	Mathematical Physics (1)	3	3	-----
18.31213	General Physics (2)	4	0	General Physics (1)
18.41217	Calculus (2)	3	3	Calculus (1)
18.312.9	Waves and vibration	3	4	General Physics (1)
18.11222	General chemistry for Physics	3	4	General Chemistry (1)
18.31241	Specialized English language for Physics	2	2	-----
-----	Volunteer Service (1)	----	----	-----
<b>Second Year: Second Term</b>				
18.31212	Alternating Current Circuits	3	4	-----
18.312.8	Mathematical Physics (2)	3	3	Mathematical Physics (1)
18.31228	Classical Mechanics (1)	3	3	Mathematical Physics (1)
18.31222	Electromagnetism	3	3	General Physics (2)
18.31227	Thermodynamics	2	2	General Physics (1)
18.3121.0	Physical Optics	3	4	Waves and vibration
-----	Volunteer Service (2)	----	----	-----
<b>Third Year: First Term</b>				
18.31221	Mathematical Physics (3)	3	3	Mathematical Physics (2)
18.31220	Classical Mechanics (2)	3	3	Classical Mechanics (1)
18.31227	Electronics (1)	3	4	General Physics (2)
18.31223	Scientific Programming	3	4	Mathematical Physics (2)
18.31222	Modern Physics	3	4	General Physics (2)
18.31229	Statistical Physics	3	3	Thermodynamics
<b>Third Year: Second Term</b>				
18.31224	Solid State Physics (1)	3	4	General Physics (2)
18.31226	Quantum Mechanics (1)	3	3	Classical Mechanics (2)
18.3123.0	Nuclear Physics (1)	3	4	Modern Physics
18.31227	Computational Physics	3	4	Scientific Programming
18.31228	Electronics (2)	3	4	Electronics (1)
18.31221	Electrodynamics	3	3	Electromagnetism

<b>Fourth Year: First Term</b>				
١٨٠٣١٤٤٢	Graduation Search	٣	٣	٨٠ credit hours should be passed
١٨٠٣١٣٣١	Atomic Physics	٣	٣	Modern Physics
١٨٠٣١٤٢٩	Solid State Physics (٢)	٣	٤	Solid State Physics (١)
-----	Elective course (١)	٢	٢	See Elective course (١)
١١٠١٠١١٢	Research & Essay Writing Skills	٢	٢	-----
١٨٠٣١٣٣٢	Radiation Physics	٢	٢	Nuclear Physics (١)
١٨٠٣١٤٥١	Introduction to Plasma Physics	٢	٢	Electrodynamics
<b>Fourth Year: Second Term</b>				
١٨٠٣١٤٢٥	Nuclear Physics (٢)	٣	٤	Nuclear Physics (١)
١٨٠٣١٤٢٤	Laser Physics	٢	٢	Atomic Physics
١٨٠٣١٤١٦	Physics of Semiconductors	٣	٤	Solid State Physics (١)
١٨٠٣١٤٢٣	Quantum Mechanics (٢)	٣	٣	Quantum Mechanics (١)
-----	Elective course (٢)	٢	٢	See Elective course (٢)
١٨٠٣١٤٤٨	Molecular spectroscopy	٢	٢	Atomic Physics
١٨٠٣١٤١٨	Materials physics	٢	٢	Solid State Physics (٢)
<b>Electives1</b>				
١٨٠٣١٣٣٤	Biophysics	٢	٢	General Physics (٢)
١٨٠٣١٤٥٣	Thin Films	٢	٢	Electronics (١)
١٨٠٣١٤٥٥	Advanced Laboratory	٢	٢	Solid State Physics (١)
<b>Electives2</b>				
١٨٠٣١٤٤٤	Nanostructures	٢	٢	Solid State Physics (١)
١٨٠٣١٤٢٢	Elementary Particles	٢	٢	Nuclear Physics (١)
١٨٠٣١٤٢٠	Physics of Renewable Energy	٢	٢	Solid State Physics (١)