

Study Plan of the Program of Physics

Course ID	Course Title	Credit Hours	Contact Hours	Pre-requisite
First Year: First Term				
11030119	English language (1)	3		-----
19041101	Calculus (1)	4		-----
19011101	General Biology (1)	4		-----
11010101	Islamic culture (1)	2		-----
11020204	Health Culture	1		-----
19091213	Arabic editing	2		-----
First Year: Second Term				
11030219	English language (2)	3		English language (1)
19031104	General Physics (1)	4		-----
19061201	General Chemistry (1)	4		-----
11020107	Holley Quran	2		-----
11010111	Islamic Culture (2)	2		Islamic Culture (1)
Second Year: First Term				
19031207	General Physics (2)	4		General Physics (1)
19062206	General chemistry for Physics	3		General Chemistry (1)
19031206	Mathematical Physics (1)	3		
19031209	Calculus (2)	3		Calculus (1)
19032203	Waves and vibration	3		General Physics (1)
19031211	Specialized English language for physics	2		
	Voluntary service 1			
Second Year: Second Term				
19031208	Alternating Current Circuits	3		General Physics (2)
19032206	Mathematical Physics (2)	3		Mathematical Physics (1)
19032208	Classical Mechanics (1)	3		Mathematical Physics (1)
19031322	Electromagnetism	3		General Physics (2)
19031310	Thermodynamics	2		General Physics (1)
19032204	Physical Optics	3		Waves and vibration
	Voluntary service 2			
Third Year: First Term				
19031321	Mathematical Physics (3)	3		Mathematical Physics (2)
19031325	Classical Mechanics (2)	3		Classical Mechanics (1)
19031327	Electronics (1)	3		General Physics (2)
19031323	Scientific Programming	3		Mathematical Physics 2
19032202	Modern Physics	3		General Physics (2)
19031329	Statistical Physics	3		Thermo-dynamics
Third Year: Second Term				
19031324	Solid State Physics (1)	3		General Physics (2)
19031326	Quantum Mechanics (1)	3		Classical Mechanics (2)
19031330	Nuclear Physics (1)	3		Modern Physics
19031427	Computational Physics	3		Scientific Program

19031328	Electronics (2)	3		Electronics (1)
19031421	Electrodynamics	3		Electro-magnetism
				Fourth Year: First Term
19031452	Graduation Search	3		101 credit hours should be passed
19031331	Atomic Physics	3		Modern Physics
19031429	Solid State Physics (2)	3		Solid State Physics (1)
	Department elective (1)	2		
11010112	Research Essay Writing Skills	2		
19031332	Radiation Physics	2		Nuclear Physics (1)
19031451	Introduction to Plasma Physics	2		Electro-dynamics
				Fourth Year: Second Term
19031425	Nuclear Physics (2)	3		Nuclear Physics (1)
19031400	Laser Physics	2		Atomic Physics
19031416	Physics of Semiconductors	3		Solid State Physics (2)
19031423	Quantum Mechanics (2)	3		Quantum Mechanics (1)
	Department elective (2)	2		101 credit hours should be passed
19031438	Molecular spectroscopy	2		Atomic Physics
19031418	Materials physics	2		Solid State Physics (2)
				Electives
19031334	Biophysics	2		General Physics (2)
19031354	Physics of Thin Films	2		Solid State Physics (1)
19031444	Advanced Laboratory Techniques	2		Solid State Physics (1)
19031456	Nanostructures	2		Solid State Physics (2)
19031458	Elementary Particles	2		Nuclear Physics (1)
19031420	Physics of Renewable Energy	2		Solid State Physics (2)