

Study Plan for Department of physics
2019/2020
(135) Credit Hours

First: University Requirements (24 Credit Hours)			
1. Compulsory University Requirements (12 Credit Hours)			
Course	Course Name	Hrs	Prerequisites
01101101	Military Sciences*	3	Jordanian student
01101102	National Education*	3	Jordanian student
01101111	Arabic Language**	3	01100011 Pre
01101112	English Language**	3	01100012 Pre
*Non-Jordanian student has the right to register it or choose one of the courses offered by the university.			
** If the student does not pass the level exams should be take the following courses: Remedial Arabic language (01100011), Remedial English language (01100012), Remedial computer skills (01100051)			
2. Elective University Requirements (12 Credit Hours)			
Course	Course Name	Hrs	Prerequisites
01101103	Traffic Education	3	
01101104	Innovation and Entrepreneurship	3	
01101121	Life Skills	3	
01101131	Islamic Education	3	
01101132	Jerusalem and the Hashemite custodianship	3	
01101141	Sports and Health	3	
01101142	Environment and Society	3	
01101151	Computer Skills	3	01100051 Pre
01101152	Internet and communication	3	
01101161	Economics System and Concepts		
01101171	Psychology and Society	3	
01101172	Modern language	3	
01101213	Communication Skills in Arabic	3	01101111 Pre
01101214	Communication Skills in English	3	01101112 Pre
01101243	Safety and First Aid	3	
01101281	Scientific Research Methods	3	
01101282	Introduction to Astronomy	3	
03011101	Law in Our Life	3	
03021201	Human Rights	3	
Second: Compulsory Faculty Requirements (21 Credit Hours)			
Course	Course Name	Hrs	Prerequisites
06051211	Programming Fundamentals	3	01100051 Pre
11011101	General Chemistry (1)	3	-
11011281	General Biology	3	-
11021101	General Physics (1)	3	-
11031101	Calculus (1)	3	-
11031141	Statistics and Probabilities	3	11031101 Pre
11031202	Calculus (2)	3	11031101 Pre
Third: Department Requirements (87 Credit Hours)			
1. Compulsory Department Requirements (75 Credit Hours)			
Course	Course Name	Hrs	Prerequisites
11032164	Ordinary differential equations	3	11032103 Sim
11021111	General physics laboratory (1)	1	11021101 Sim

11021202	General physics (2)	3	11021101 Pre
11021212	General physics laboratory (2)	1	11021202 Sim
11022121	Optics	3	11021202 Pre
11022161	Modern Physics	3	11021202 Pre
11022181	Mathematical Physics (1)	3	11021202 Pre
11022213	Intermediate physics laboratory	1	11022121 Sim
11022222	Vibrations and waves	3	11022181 Pre
11022231	Electronics	3	11021202 Pre
11022282	Mathematical Physics (2)	3	11022181 Pre
11022283	Computer Applications in Physics	3	11022161 Pre
11023114	Electronics laboratory	1	11022231 Sim
11023123	Laser physics	3	11023162 Sim
11023132	Electromagnetic (1)	3	11022181 Pre
11023151	Classical Mechanics (1)	3	11022181 Pre
11023162	Quantum Mechanics (1)	3	11022161 Pre 11022181 Pre
11023215	Advance Physics laboratory	2	11022213 Pre
11023233	Electromagnetic (2)	3	11023132 Pre
11023241	Thermodynamics	3	11022161 Pre
11023252	Classical Mechanics (2)	3	11023151 Pre
11023263	Quantum Mechanics (2)	3	11023162 Pre
11024124	Environmental Physics	3	11023241 Pre
11024142	Statistical mechanics	3	11023241 Pre 11023162 Pre
11024143	Energy Physics	3	11022181 Pre 11023241 Pre
11024271	Solid State Physics	3	11023162 Pre 11023263 Pre
11032103	Calculus (3)	3	11031202 Pre
08012152	Sciences Curricula and teaching methods	3	4 th level
2. Elective Department Requirements (12 Credit Hours)			
Course	Course Name	Hrs	Prerequisites
11023164	Atomic and molecular Physics	3	11023162 Pre
11023172	Material Science	3	11022161 Pre
11023225	Medical Physics	3	11022161 Pre
11023234	Digital Electronics	3	11022131 Pre
11023253	Astro Physics	3	11023151 Pre 11023233 Pre
11024165	Nuclear Physics	3	11023162 Pre
11024226	Radiation Physics	3	11023162 Pre
11024266	Theory of Special Relativity	3	11022161 Pre
11024291	Special Topics in Physics	3	Department Approval
Fourth: Free courses(3 credit hours):any university course			