

General courses (Units) :

No	Module Name	Code	Requirement	Credits
1	Arabic LanguageI	AR011	--	2
2	Arabic LanguageII	AR121	AR011	2
3	English LanguageI	EL011	--	2
4	English Language II	EL121	EL011	2
5	National Culture	NL100	--	2
6	University Skills	US022	--	3
Total				13

Compulsory supporting courses (Units):

No	Module Name	Code	Requirement	Credits
1	Computer Science	CS011	--	3
2	Mathematics I	MA011	--	3
3	Mathematics II	MA121	MA011	3
4	Mathematics III	MA211	MA121	3
5	Linear Algebra	MA212	--	3
6	Ordinary Differential Equations	MA213	MA121	3
7	Partial Differential Equations	MA314	MA213	3
8	Numerical Analysis	MA413	MA314	3

9	Complex Analysis	MA313	MA121	3
10	General Statics	ST011	--	3
11	General Chemistry	CH010	--	3
المجموع				33

Compulsory specialized courses (89 Units) :

No	Module Name	Code	Requirement	Credits
1	General Mechanics	PH111	--	4
2	Electricity	PH112	--	4
3	Heat and properties of Matter	PH113	--	4
4	Sound and Light	PH114	--	3
5	Physics Laboratory I	PH116	PH113	1
6	Mechanics I	PH211	PH111	4
7	Mechanics II	PH212	PH211 MA121	3
8	Magnetism and Alternating Current	PH213	PH112	4
9	Electronics Physics I	PH214	PH213	2
10	Physics Laboratory II	PH215	PH112 PH114	1
11	Thermodynamics	PH216	PH113 MA121	3
12	Physics Laboratory III	PH218	PH213 PH215	1

13	Mechanics III(Classical)	PH311	PH212	3
14	Modern and Atomic Physics	PH312	PH213	3
15	Physical Optics	PH313	PH114 MA121	3
16	Statistical Physics	PH314	PH216	3
17	Electromagnetic Theory I	PH315	PH213	3
18	Electromagnetic Theory II	PH316	PH315 MA314	3
19	Quantum Mechanics I	PH317	PH312 MA213	3
20	Physics Laboratory V	PH318	PH218 PH313 PH312	1
21	Electronics Physics II	PH319	PH218 PH214	2
22	Computer Programming	PH320	MA212	3
23	Physics Laboratory IV	PH321	PH214 PH319	1
24	Computational Physics	PH323	PH320 MA213	3
25	Mathematical Physics	PH324	PH317 MA213	3
26	Quantum Mechanics II	PH411	PH317 MA314	3

27	Nuclear Physics I	PH413	PH317 PH312	3
28	Nuclear Physics II	PH414	PH312 PH413	3
29	Solid State Physics I	PH415	PH312 PH314	3
30	Solid State Physics II	PH416	PH415	3
31	Physics Laboratory VI	PH419	PH413	2
32	Graduation project	PH499	Complete all 6TH semester RM400	2
33	Research Methods	RM400	--	2
Total				89

Elective courses (4-5 Units) :

No	Module Name	Code	Requirement	Credits
1	An Introduction to Probability	ST111	ST011	3
2	Physics Laboratory VII	PH420	PH415	2
3	Independent study I	PH421	According to	2
4	Independent studyII	PH422	According to	2
5	Medical physics	PH423	--	2
6	Nano physics	PH424	--	2
7	Plasma physics	PH425	--	2

8	Atomic and Molecular Physics	PH426	--	2
Total				17