



(132) Credit Hours

**First: University Requirements:** 27 Credit Hours

**1. University Compulsory** 12 credit hours

Course No.	Course Name	Cr.	Pre-req.
110101	Arabic Language Skills(1)	3	----
111100	Military Science	3	----
111101	National Education	3	----
130101	English Language Skills (1)	3	----

**2. University Electives** 15 credit hours  
Students have to study at least one course per group and not more than two courses per group

Group 1 Languages			
110102	Skills of Arabic Language (2)	3	110101
130103	English Language Skills (3)	3	----
140103	Foreign Language (French 1)	3	----
140104	Foreign Language (Italian 1)	3	----
140106	Foreign Language (Hebrew 1)	3	----
Group 2 Humanitarian			
111111	Introduction to Sociology	3	----
111112	Introduction to Psychology	3	----
111133	Human Thoughts & Civilization (1)	3	----
111142	Communication and Society	3	----
0115255	Culture of Development		
Group 3 Sciences, Technology & Agriculture			
240151	Human and Environment	3	----
620105	Automobile Essentials	3	----
0910101	Health Promotion of Individuals and Community	3	----
0910105	Principles of Nursing and First Aid	3	----
0750111	Computer Skills	3	----

**Second: Faculty Requirement:** 24 Credit Hours

**1. Faculty Compulsory** 21 Credit Hours

130102	English Language Skills (2)	3	130101
210101	Calculus (1)	3	-
210122	Fundamentals of Scientific Knowledge	3	-
210231	Introduction to Probability & Statistics	3	-
211105	General Physics	3	-
212101	General Chemistry (1)	3	-
240101	General Biology (1)	3	

**2. Faculty Elective** 3 Credit Hours

130102	Applied Physics	3	
212103	General Chemistry (2)	3	212101

**Third: Major Requirements:** 81 Credit Hours

**1. Compulsory Courses:** 67Credit Hours

240107	General Biology (2)	3	240101
240108	General Biology (2) lab	1	or Con 240107
240216	Microbiology	3	240107
240217	Microbiology lab	1	or Con 240216
240231	Genetics	3	240107
240232	Genetics lab	1	or Con 240231
240233	Cell Biology	3	240107
240234	Human genetics	2	240231
240322	Plant Biotechnology	3	240281
240323	Plant tissue culture	1	or Con 240322
240335	Cytogenetics	1	240234
240336	Cytogenetics lab	1	or Con 240335
240337	Immunology	3	240233
240338	Immunology lab	1	or Con 240337
240343	Biochemistry (1)	3	212243+240233
240344	Biochemistry (1) lab	1	240341 or Con
240386	Molecular Biology	3	240233
240387	Molecular Biology lab	1	240386
240352	Environmental Biotechnology	2+1	240216
240391	Entrepreneurship	2	60 C.H
240417	Microbial Biotechnology	2+1	240216
240441	Pharmaceutical Biotechnology	3	240343
240484	Applied Molecular Biology	3	240386
240485	Applied Molecular Biology Lab	1	240484 or Con
240462	Bioinformatics	1+1	240231+ 240335
240471	Animal Biotechnology	3	240386
240472	Animal tissue culture lab	1	240471 or Con
240490	Quality Control &lab management	1	90 Credit hours
240491	Ethics in Biotechnology	1	90 Credit hours
240448	Proteomics & protein technology	3	240343+240386
240494	Field Training	3	Dept. Approval
240499	Research Project	3	Dept. Approval

**2. Elective Courses:** 3 Credit Hours

240314	Virology	3	240216
240324	Plant Physiology	2+1	240107
240340	Food Biotechnology	3	240281
240439	Hematology	2+1	240337
240455	Medical and Forensic Biotechnology	3	240386
240453	Aquatic Biotechnology	3	240352
240463	Biosensors	2+1	240386
240497	Selected Topics (C)	3	Dept. Approval

**Fourth: Additional Compulsory Courses** 11 Credit Hours

212102	General Chemistry lab	1	or Con 212101
212241	Analytical Chemistry	3	212103
212242	Analytical Chemistry lab	1	212241 or Con.
212243	Organic Chemistry	2+1	212103
240106	General Biology lab	1	240101 or Con.
240281	Introduction to Biotechnology	2	240107+130102

All students should sit the examinations in Arabic, English and Computer skills. The student who fails this exam (under 50%) should pass the make up course.