

### Study plan

**Degree:** Bachelor      **Faculty:** Arts & Science      **Plan hours:** 188 hour  
**Academic year:** 1444      **Department:** Chemistry      **Plan type:** Basic  
**Gender:** Both

### Compulsory:

Level 1							
Course Code	Course Name	س	مع	مس	سع	Prerequisite	سنوي
SALAM 101	Introduction to Islamic Culture	2					
MATH 1050	Differential calculus	4					
ENG 1210	Reading Skills	5					
ENG 1220	Writing Skills	5					
		16		Total			

Level 2							
Course Code	Course Name	س	مع	مس	سع	Prerequisite	سنوي
ARAB 101	Language Skills	2					
MATH 1060	Integral Calculus	4				MATH 1050	
ENG 1230	Listening & Speaking Skills	5					
TECH 1400	Computer Skills	3					
		14		Total			

Level 3							
Course Code	Course Name	س	مع	مس	سع	Prerequisite	سنوي
PHYS 1010	General Physics(1)	5					
COM 1400	Communication Skills	2					
ENG 1604	Scientific English Language	5					
ENG 1606	Academic English Language	4					
		16		Total			

Level 4							
Course Code	Course Name	س	مع	مس	سع	Prerequisite	سنوي
SALAM 102	Islam & Building of Society	2					
BIO 2010	General Biology (1)	5					
CHEM 2010	General Chemistry (1)	5					
CHEM 2020	General Chemistry (2)	5					
		17		Total			

سع: ساعات متطلب

مع: المعدل التراكمي كمتطلب

س: سابق  
م: متزامن  
مس: مستوي كمتطلب



Level 5							
Course Code	Course Name	س	مع	مس	سع	Prerequisite	سنوي
SALAM 103	Economic System in Islam	2					
CHEM 2210	Analytical Chemistry (1)	5				CHEM 2010	
PHYS 2310	General Physics (2)	5				PHYS 1010	
CHEM 2410	Organic Chemistry (1)	5				CHEM 2010	
		17		Total			

Level 6							
Course Code	Course Name	س	مع	مس	سع	Prerequisite	سنوي
SALAM 104	Fundamentals of the political System in Islam	2					
CHEM 2110	Inorganic Chemistry (1)	4				CHEM 2010	
CHEM 3220	Analytical Chemistry (2)	5				CHEM 2210	
CHEM 3310	Physical Chemistry (1)	5				CHEM 2020	
		16		Total			

Level 7							
Course Code	Course Name	س	مع	مس	سع	Prerequisite	سنوي
ARAB 103	Arabic Composition	2				-	
BIO 3010 CHEM	General Biochemistry (1)	4				CHEM 2010	
CHEM 3320	Physical Chemistry (2)	5				CHEM 3310	
CHEM 3420	Organic Chemistry (2)	5				CHEM 2410	
		16		Total			

Level 8							
Course Code	Course Name	س	مع	مس	سع	Prerequisite	سنوي
CHEM 3120	Inorganic Chemistry (2)	4				CHEM 2110	
CHEM 3230	Spectroscopic Methods of Analysis	4				CHEM 3220	
CHEM 3430	Polymer Chemistry	3				CHEM 3420	
		11		Total			

Level 9							
Course Code	Course Name	س	مع	مس	سع	Prerequisite	سنوي
CHEM 3130	Coordination Chemistry	4				CHEM3120	
CHEM 4240	Chromatography	4				CHEM3220	
CHEM 4330	Electrochemistry	3				CHEM 3320	



CHEM 4440	Natural Products Chemistry	3				CHEM 3420	
		14	Total				

Level 10							
Course Code	Course Name	س	مع	مس	سع	Prerequisite	سنوي
CHEM 4340	Surface & Catalysis Chemistry	3				CHEM 3320	
CHEM 4450	Organic Reaction Mechanism	3				CHEM 3420	
CHEM 4590	Summer Training	2				-	
		8	Total				

Level 11							
Course Code	Course Name	س	مع	مس	سع	Prerequisite	سنوي
CHEM 4140	Organometallic Chemistry	3				CHEM 2110 CHEM 2410	
CHEM 4150	Selected Topics in Inorganic Chemistry	3				CHEM 3130	
CHEM 4460	Organic Spectroscopy	4				CHEM 3420	
CHEM 4980	Research Project (1)	2				CHEM 4340 CHEM 4450	
		12	Total				

Level 12							
Course Code	Course Name	س	مع	مس	سع	Prerequisite	سنوي
CHEM 4010	Ethics	2				-	
CHEM 4470	Petroleum Chemistry	3				CHEM 3420	
CHEM 4990	Research Project (2)	3				CHEM 4980	
		8	Total				

### Elective Courses with other Departments (8)

Course Code	Course Name	س	مع	مس	سع	Prerequisite	سنوي
STAT 2010	Fundamentals of Statistics & Probabilities	4				MATH 1060	
PHYS 2110	Optics(1)	4				PHYS 1010	
PHYS 2230	Advanced Physics	4				PHYS 1010	
BIO 2410	Animal Physiology for Chemistry Students	4				BIO 2010	
PHYS 2410	Thermodynamics	4				PHYS 1010 MATH 1060	
MATH 3410	Differential Equations	4				MATH 1060	
		24		Total			

### Elective Courses within the Department(9)

Course Code	Course Name	س	مع	مس	سع	Prerequisite	سنوي
CHEM 4160	Applications of Transition Metals	3				CHEM 3130	
CHEM 4170	Nuclear & Radiochemistry	3				CHEM 2110	
CHEM 4250	Statistical Methods in Analytical Chemistry	3				CHEM 3220	
CHEM 4260	Environmental & Pollution Chemistry	3				CHEM 2210	
CHEM 4350	Industrial Chemistry	3				CHEM 3320	
CHEM 4360	Quantum Chemistry	3				CHEM 3320	
CHEM 4370	Corrosion Chemistry	3				CHEM 4340	
CHEM 4480	Carbohydrates Chemistry	3				CHEM 3420	
CHEM 4490	Fundamentals of Nano chemistry	3				CHEM 2010	
		27		Total			