



Study plan for the Bachelor of Science in Chemistry Program (Number of program hours = 126)

First Year

First level			
Code	Course Name	Hr	Requisite
011ENG-6	Intensive English Program 1	6	-
101PHYS-4	Introduction to Physics	4	-
101CHEM-4	General Chemistry -1	4	-
111IC1-2	The Entrance to the Islamic Culture	2	-
Total		16	

Second level			
Code	Course Name	Hr	Requisite
101CMS-3	Computer Science	3	-
101BIOL-4	General Biology	4	-
101MATH3	Calculus - 1	3	-
110NGL-3	Scientific English for Science Students	3	011ENG-6 - S
112IC1-2	Islamic Culture -2	2	-
201ARAB-2	Arabic Language Skills	2	-
Total		17	

Second Year

Third level			
Code	Course Name	Hr	Requisite
102CMS-2	Computation Skills 2	2	101CMS-3 - S
102CHEM-3	General Chemistry 2	3	101CHEM-4 - S
113IC1-2	Islamic Culture -3	2	-
202ARAB-2	Arabic Editing	2	-
212CHEM-4	Organic Chemistry -1	4	-
232CHEM-2	Thermodynamic Chemistry	2	101CHEM-4 - S
241CHEM-2	Qualitative Analysis	2	101CHEM
Total		17	

Forth level			
Code	Course Name	Hr	Requisite
114IC1-2	Islamic Culture -4	2	-
213CHEM-4	Organic Chemistry - 2	4	212CHEM-4 - S
222CHEM-2	Chemistry of Main Group Elements	2	102CHEM-3 - S
233CHEM-3	Electrochemistry	3	232CHEM-2 - S
242CHEM-3	Quantitative Analysis-1	3	241CHEM-2 - S
261CHEM-2	Quantitative Analysis-2	2	241CHEM-2 - S
Total		16	

Third Year

Fifth level			
Code	Course Name	Hr	Requisite
313CHEM-2	Organic Chemistry 3	2	213CHEM-4 - S
323CHEM-4	Chemistry of Transition Elements	4	222CHEM-2 - S
335CHEM-3	Chemistry of Surfaces, Catalysis And Phase Rule	3	232CHEM-2 - S
341CHEM-2	Environmental Analysis	2	242CHEM-3 - S
362CHEM-2	Identification of Organic Compounds	2	213CHEM-4 - S
Total		13	

Sixth level			
Code	Course Name	Hr	Requisite
314CHEM-2	Spectroscopy of Organic Compounds	2	313CHEM-2 - S
315CHEM-2	Industrial Products	2	313CHEM-2 - S
324CHEM-2	Nuclear And Radiation Chemistry	2	222CHEM-2 - S
325CHEM-2	Solid State Chemistry	2	102CHEM-3 - S
336CHEM-4	Kinetics And Reaction Mechanism	4	232CHEM-2 - S
342CHEM-2	Instrumental Analysis 1	2	242CHEM-3 - S
363CHEM-2	Quantitative Organic Analysis	2	213CHEM-4 - S
Total		16	

Forth Year

Seventh level			
Code	Course Name	Hr	Requisite
416CHEM-2	Mechanism of Organic Reactions	2	313CHEM-2 - S
417CHEM-2	Heterocyclic Chemistry	2	313CHEM-2 - S
425CHEM-2	Inorganic And Organometallic Chemistry	2	323CHEM-4 - S
435CHEM-3	Corrosion	3	233CHEM-3 - S
464CHEM-2	Organic Synthesis	2	213CHEM-4 - S
465CHEM-2	Instrumental Analysis- 2	2	342CHEM-2 - S
470CHEM-3	Research Project	3	342CHEM-2 - S
			314CHEM-2 - S
			323CHEM-4 - S
			336CHEM-4 - S
Total		17	

Eighth level			
Code	Course Name	Hr	Requisite
418CHEM-2	Organometallic Chemistry	2	313CHEM-2 - S
419CHEM-2	Natural Products	2	313CHEM-2 - S
426CHEM-2	Inorganic Reaction Mechanisms	2	323CHEM-4 - S
436CHEM-2	Quantum Chemistry	2	101MATH-3 - S
			101CHEM-4 - S
450BCH-3	Biochemistry	3	313CHEM-2 - S
466CHEM-2	Inorganic Chemistry	2	323CHEM-4 - S
467CHEM-2	Physical Chemistry	2	335CHEM-3 - S
Total		17	