

Study Plan of the Program of Chemistry

Course ID	Course Title	Credit Hours	Contact Hours	Pre-requisite
First Year: First Term				
11030119	English language (1)	3	6	-
19041101	Differential & Integral (1)	4	4	-
19011101	General Biology	4	5	-
11020204	Health Education	1	1	-
11010101	Islamic Culture (1)	2	2	-
19091213	Arabic Editing	2	2	-
First Year: Second Term				
Course ID	Course Title	Credit Hours	Contact Hours	Pre-requisite
11030219	English language (2)	3	6	11030119
19031104	General Physics	4	5	-
19061104	General Chemistry	4	5	-
11020107	Recitation Correction	2	2	-
11010111	Islamic Culture (2)	2	2	-

Second Year: First Term				
Course ID	Course Title	Credit Hours	Contact Hours	Pre-requisite
۱۹.۶۱۲.۴	General Chemistry 2	4	5	General Chemistry 1 (19061201)
۱۹.۶۲۲.۵	Inorganic Chemistry I	4	5	General Chemistry 1 (19061201)
۱۹.۶۱۲.۲	Organic Chemistry 1	4	5	General Chemistry 1 (19061201)
۱۹.۴۲۲.۳	Principles of Statistics & Probability	3	3	-
۱۹.۶۱۲.۹	Specialized English Language	2	2	English Language 2 (11030219)
۱۱.۱.۱۱۳	Voluntary Community Service 1	0	0	-
Second Year: Second Term				
Course ID	Course Title	Credit Hours	Contact Hours	Pre-requisite
۱۹.۶۱۳.۱	Organic Chemistry 2	4	5	Organic Chemistry 1 (19061202)
۱۹.۶۲۲.۲	Inorganic Chemistry 2	4	5	Inorganic Chemistry I (19062205)
۱۹.۳۲۲.۱	General Physics 2	3	4	General Physics 1 (19031104)
۱۹.۱۲۲۱۱	General Physiology	3	3	General Biology (19011101)
۱۹.۴۱۲.۲	Calculus 2	3	3	Calculus 1 (19041101)
11010123	Voluntary Community Service 2	0	1	

Third Year: First Term				
Course ID	Course Title	Credit Hours	Contact Hours	Pre-requisite
۱۹.۶۱۴۳۷	Inorganic Chemistry 3	3	3	Inorganic Chemistry 2 (19062202)
۱۹.۶۱۳.۷	Physical Chemistry 1	3	4	General Chemistry 2 (19061204)
۱۹.۶۱۳۲۵	Analytical Chemistry 1	4	5	General Chemistry 1 (19061201)
۱۹.۶۱۳.۴	Biochemistry 1	4	5	Organic Chemistry 2 (19061301)
۱۹.۶۱۴۱۹	Petroleum Chemistry	2	2	Organic Chemistry 2 (19061301)
۱۱.۱.۱۱۲	Research and Essay Writing skills	2	2	
Third Year: Second Term				
Course ID	Course Title	Credit Hours	Contact Hours	Pre-requisite
۱۹.۶۱۳۲۲	Physical Chemistry 2	2	2	Physical Chemistry 1 (19061307)
۱۹.۶۱۳۲۴	Analytical Chemistry 2	4	5	Analytical Chemistry 1 (19061325)
۱۹.۶۱۴.۲	Chemistry of Heterocyclic Compounds	3	4	Organic Chemistry 2 (19061301)
۱۹.۶۱۳۱۴	Environmental Chemistry	2	2	-
۱۹.۶۱۳۲۶	Principles of Industrial Chemistry	2	2	General Chemistry 2 (19061204)
19061332	Electrochemistry	2	2	Physical Chemistry 1 (19061307)
۱۹.۶۱۳۱۶	Nuclear and Radioactive Chemistry	2	2	Physical Chemistry 1 (19061307)

Fourth Year: First Term				
Course ID	Course Title	Credit Hours	Contact Hours	Pre-requisite
۱۹۰۶۱۴۲۳	Polymer Chemistry	3	3	Organic Chemistry 2 (19061301)
۱۹۰۶۱۴۱۷	Analytical Chemistry 3	3	4	Analytical Chemistry 1 (19061325)
۱۹۰۶۱۴۳۸	Physical Chemistry 3	3	3	Physical Chemistry 1 (19061307)
۱۹۰۶۱۳۱۱	Spectroscopy	2	2	Organic Chemistry 2 (19061301)
	Department Elective 1 (chemistry)	3	3	
۱۹۰۶۱۴۲۷	Graduation Project	2	3	Passing 85 hr
Fourth Year: Second Term				
Course ID	Course Title	Credit Hours	Contact Hours	Pre-requisite
19061401	Material Science	3	3	Physical Chemistry 1 (19061307)
۱۹۰۶۱۴۱۸	Coordination Chemistry	2	3	Inorganic Chemistry 2 (19062202)
۱۹۰۶۱۴۲۰	Chemical Kinetics	2	2	Physical Chemistry 1 (19061307)
۱۹۰۶۱۴۴۰	Chemistry of Natural Products	3	2	Organic Chemistry 2 (19061301)
۱۹۰۶۱۴۲۵	Organic Synthesis	3	3	Organic Chemistry 2 (19061301)
	Department Elective 2 (chemistry)	3	4	

Electives

Department Elective 1

Course ID	Course Title	Credit Hours	Contact Hours	Pre-requisite
۱۹.۶۱۴۴۳	Water Treatment	3	3	Principles of Industrial Chemistry (19061326)
۱۹.۶۱۴۴۵	Organic Reaction Mechanism	3	3	Organic Chemistry 2 (19061301)
۱۹.۶۱۴۴۷	Electroanalytical Methods	3	3	Electrochemistry (19061332)

Department Elective 2

Course ID	Course Title	Credit Hours	Contact Hours	Pre-requisite
۱۹.۶۱۴۴۲	Biochemistry 2	3	3	Biochemistry 1 (19061304)
۱۹.۶۱۴۴۴	Polynuclear Aromatic Compounds	3	3	Organic Chemistry 2 (19061301)
۱۹.۶۱۴۴۶	Chemistry of Minerals extraction and Corrosion	3	3	Inorganic Chemistry 2 (19062202)