

Chemistry Department Study Plan

Level	Course Code	Course Title	Required or Elective	Pre- Requisite Courses	Contact Hours		Total Credit Hours	workload	ECTS
					Lecture	Pract.			
First Year									
Level 1	101SLM 2	Islamic Culture I	R		2	0	2	103.6	3.7
	105ENGL-6	Intensive Course in English Language	R		12	3	6	310.8	11.1
	101BIO-4	General Biology	R		3	2	4	207.2	7.4
	101MATH-3	General Mathematics	R		3	0	3	154	5.5
	101CSC-3	Introduction to Computer.	R		2	2	3	154	5.5
	Total of Level 1				22	7	18	929.6	33.2
Level 2	102SLM-2	Islamic Culture II	R		2	0	2	103.6	3.7
	101ARB-2	Arabic Language Skills	R		2	0	2	103.6	3.7
	101PHYS-4	General Physics	R		3	2	4	207.2	7.4
	101CHEM-4	General Chemistry	R		3	2	4	190	6.79
	106ENGL-3	English for Science	R	105ENGL	3	0	3	154	5.5
	Total of Level 2				13	4	15	758.4	27.09
TOTAL of Year 1					35	11	33	1688	60.29
Second Year									
Level 3	102ARB-2	Arabic Writing	R		2	0	2	103.6	3.7
	103SLM-2	Islamic culture III	R		2	0	2	103.6	3.7
	201MATH-3	Calculus	R		3	0	3	154	5.5
	231CHEM-3	Aliphatic organic Chemistry	R		2	2	3	152	5.45
	211CHEM-3	Volumetric Analytical Chemistry	R		2	2	3	155.67	5.56
	201CHEM-3	General and physical Chemistry	R	101CHEM	3	2	4	206.17	7.36
	Total of Level 3				14	6	17	875.04	31.27
Level 4	104SLM-2	Islamic Culture IV	R		2	0	2	110.8	3.7
	202MATH -3	Differential Equations	R	201MATH	3	0	3	166.2	5.5
	212CHEM-3	Chemistry of Gravimetric Analysis	R		2	2	3	170	6.07
	221CHEM-4	Chemistry of Main Groups	R		3	2	4	221.67	7.92
	232CHEM-3	Aromatic Organic Chemistry	R	231CHEM	2	2	3	152.5	5.45
	241CHEM-3	Thermodynamics	R		2	2	3	151.67	5.42
	Total of Level 4				14	8	18	972.84	34.06
TOTAL of Year 2					28	14	35	1847.88	65.33
Third Year									
Level 5	313CHEM-3	Chromatographic Analysis	R		2	2	3	151	5.39
	322CHEM-4	Chemistry of Transition Elements	R	CHEM221	3	2	4	212.5	7.59
	333CHEM-3	Heterocyclic Organic Chemistry	R		2	2	3	175.33	6.26
	342CHEM-3	Kinetic Chemistry	R		2	2	3	174	6.21
	343CHEM-3	Surface Chemistry & Catalysis	R		3	0	3	159.17	5.68

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					Lecture	Pract.			
	Total of Level 5				12	8	16	872	31.13
Level 6	314CHEM-3	Electrochemical analysis methods	R		2	2	3	174.17	6.22
	323CHEM-3	Co-ordination Chemistry	R	322CHEM	2	2	3	150.5	5.38
	334CHEM-2	Spectroscopy of Organic Compounds	R		2	0	2	110.83	3.96
	335CHEM-3	Organic Reaction Mechanisms	R		2	2	3	153.33	5.48
	344CHEM-3	Electrochemistry	R		2	2	3	159.83	5.71
	Total of Level 6				10	8	14	748.66	26.75
TOTAL of Year 3					22	16	30	1620.66	57.88
Fourth Year									
Level 7	436CHEM-3	Chemistry of Natural Products	R		2	2	3	156	5.57
	437CHEM-2	Stereochemistry	R		2	0	2	108.33	3.87
	445CHEM-3	Solution Chemistry	R		2	2	3	165	5.89
	446CHEM-2	Polymer Chemistry	R		2	0	2	93.33	3.33
	447 CHEM-3	Quantum Chemistry	R	202MATH	3	0	3	164.17	5.86
	491CHEM-2	Graduation Project	R	Dep. Approval	1	6	4	241.67	8.63
	Total of Level 7				12	10	17	928.5	33.15
Level 8	415CHEM-4	Methods of Instrumental analysis	R	314CHEM	3	2	4	211.67	7.56
	424 CHEM-3	Lanthanides & Actinides	R	323CHEM	2	2	3	149.33	5.33
	425CHEM-2	Group Theory	R		2	0	2	107.5	3.84
	438CHEM-3	Organic applied chemistry	R		2	2	3	163.33	5.83
	439CHEM-3	Principles of Biochemistry	R		2	2	3	162.83	5.82
	448CHEM-2	Photochemistry	R		2	0	2	116.67	4.17
	Total of Level 8				13	8	17	911.33	32.55
TOTAL of Year 4					25	18	34	1839.83	65.7
Total					110	59	132	6996.37	249.2