



Bachelor of Science in Chemistry Model Study Plan (2020-2021 Cohort onwards)

For Students Admitted to the University from the Fall Semester
Total Degree Credit hours: 120

Semester	Course Code	Course Title	Cr	Course type	Semester	Course Code	Course Title	Cr	Course type
Year 1 1 (Fall)	SPH102	Introduction to Academic English For Science	3	Gen Ed Course (Cluster 1: Area 2: English Communication)	Year 1 2 (Spring)	CHEM123	General Chemistry II for Science Students	3	Specialization
	PHYS105	General Physics I	3	Gen Ed Course (Cluster 3: Area 1: Natural Sciences)		CHEM115	General Chemistry Lab	1	Specialization
	CHEM111	General Chemistry I	3	Specialization		MATH110	Calculus II	3	Support Course
	MATH105	Calculus I	3	Gen Ed Course (Cluster 1: Area 5: Quantitative Reasoning)		PHYS110	General Physics II	3	Support Course
	CSBP112	Introduction To Programming	3	Support Course		BIOC100	Basic Biology I	3	Support Course
Year 2 3 (Fall)	CHEM241	Organic Chemistry I	3	Specialization	Year 2 4 (Spring)	CHEM222	Analytical Chemistry	4	Specialization
	CHEM242	Organic Chemistry II	3	Specialization		CHEM245	Organic Chemistry Lab I	1	Specialization
	CHEM251	Physical Chemistry I	3	Specialization		CHEM345	Organic Chemistry Lab II	1	Specialization
	CHEM255	Physical Chemistry Lab I	1	Specialization		CHEM311	Inorganic Chemistry I	3	Specialization
	ENGL310	Writing for Research	3	Support Course		Elective	Student choice	3	Major Elective
	Elective	Student choice	3	Gen Ed Course (Cluster 2: Area 2: Social and Behavioral Sciences)		GESU121	Sustainability	3	Gen Ed Course (Cluster 3: Area 2: Sustainability)
Year 3 5 (Fall)	CHEM321	Instrumental Analysis I	4	Specialization	Year 3 6 (Spring)	CHEM351	Physical Chemistry II	3	Specialization
	CHEM332	Chemistry of Elements	3	Specialization		CHEM356	Physical Chemistry Lab II	1	Specialization
	ICHEM31	Biochemistry I	4	Specialization		ENRE222	Fundamentals of Innovation and Entrepreneurship	3	Major Elective
	Elective	Student choice	3	Gen Ed Course (Cluster 2: Area 1: Humanities and Fine Arts)		HSIS105	Emirates Studies	3	Gen Ed Course (Cluster 1: Area 1: Innovation and Entrepreneurship)
Year 4 7 (Fall)	CHEM419	Internship	6	Internship	Year 4 8 (Spring)	CHEM418	Research Project	1	Specialization
	CHEM331	Inorganic Chemistry II	3	Specialization		CHEM337	Practical Inorganic Chemistry	1	Specialization
	Elective	Student choice	3	Major Elective		Elective	Student choice	3	Free Elective
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