

Bachelor of Science in Chemistry Model Study Plan (2022-2023 Cohort onwards)

For Students Admitted to the University from the Fall Semester

Total Degree Credit hours: 120

Semester	Course Code	Course Title	CH	Course type	Semester	Course Code	Course Title	CH	Course type
Year 1 1 (Fall)	CSPI101	Introduction to Academic English For Science	3	Gen Ed Course (Cluster 1: Area 2: English Communication)	Year 1 2 (Spring)	CHEM113	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
Year 2 3 (Fall)	CSPI112	Introduction To Programming	3	Support Course	Year 2 4 (Spring)	BIOC100	Basic Biology I	3	Support Course
	CHEM241	Organic Chemistry I	3	Specialization		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
Year 3 5 (Fall)	CHEM255	Physical Chemistry Lab I	1	Specialization	Year 3 6 (Spring)	CHEM331	Inorganic Chemistry I	3	Specialization
	ENG310	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)		GISU121	Sustainability	3	Gen Ed Course (Cluster 3: Area 2: Sustainability)
Year 4 7 (Fall)	CHEM311	Instrumental Analysis I	4	Specialization	Year 4 8 (Spring)	CHEM351	Physical Chemistry II	3	Specialization
	CHEM312	Chemistry of Elements	3	Specialization		CHEM356	Physical Chemistry Lab II	1	Specialization
	BCHM361	Biochemistry I	4	Specialization		GEIE222	Fundamentals of Innovation and Entrepreneurship	3	Gen Ed Course (Cluster 1: Area 1: Innovation and Entrepreneurship)
	Elective	Student choice	3	Gen Ed Course (Cluster 2: Area 1: Humanities and Fine Arts)		HSIS105	Emirates Studies	3	Gen Ed Course (Cluster 2: Area 3: Emirate Society)
						SLMS100/SLM101	Elective	###F1	###F1
						Elective	Student choice	3	Major Elective
						CHEM418	Research Project	3	Specialization
						CHEM337	Practical Inorganic Chemistry	1	Specialization
						Elective	Student choice	3	Free Elective
						Elective	Student choice	3	Free Elective
						###F1	###F1	###F1	###F1
						###F1	###F1	###F1	###F1
						###F1	###F1	###F1	###F1
						###F1	###F1	###F1	###F1

Bachelor of Science in Chemistry Model Study Plan (2025-2026 Cohort onwards)

For Students Admitted to the University from the Fall Semester

Total Degree Credit hours: 120

Semester	Course Code	Course Title	CH	Course type	Semester	Course Code	Course Title	CH	Course type
Year 1 1 (Fall)	PHYS105	General Physics I	3	Specialization	Year 1 2 (Spring)	CHEM113	General Chemistry II for Science Students	3	Specialization
	CHEM111	General Chemistry I	3	Specialization		CHEM115	General Chemistry Lab	1	Specialization
	MATH105	Calculus I	3	Specialization		MATH110	Calculus II	3	Support Course
	CSPI110	Algorithms and Problem Solving	3	Specialization		PHYS110	General Physics II	3	Support Course
Year 2 3 (Fall)	GEEM110	Contemporary Emirati Studies	3	Gen. Ed. Theme 1: UAE National Identity	Year 2 4 (Spring)	BIOC100	Basic Biology I	3	Support Course
	CHEM241	Organic Chemistry I	3	Specialization		GEAE101	Academic English for Humanities and STEM	3	Gen. Ed. Theme 2: Academic Language Proficiency
	CHEM245	Organic Chemistry Lab I	1	Specialization		CHEM222	Analytical Chemistry	4	Specialization
	CHEM251	Physical Chemistry I	3	Specialization		CHEM242	Organic Chemistry II	3	Specialization
Year 3 5 (Fall)	CHEM255	Physical Chemistry Lab I	1	Specialization	Year 3 6 (Spring)	CHEM345	Organic Chemistry Lab II	1	Specialization
	ENG310	Writing for Research	3	Support Course		CHEM331	Inorganic Chemistry I	3	Specialization
	GEIT113	Introduction to Artificial Intelligence	3	Gen. Ed. Theme 3: Innovation		Elective	Student choice	3	Support Elective
	GEI222	Fundamentals of Innovation and Entrepreneurship	3	Gen. Ed. Theme 4: Entrepreneurship		GISU121	Sustainability	3	Gen. Ed. Theme 5: Sustainability
Year 4 7 (Fall)	CHEM311	Instrumental Analysis I	4	Specialization	Year 4 8 (Spring)	CHEM351	Physical Chemistry II	3	Specialization
	CHEM312	Chemistry of Elements	3	Specialization		CHEM356	Physical Chemistry Lab II	1	Specialization
	BCHM361	Biochemistry I	4	Specialization		Elective	Student choice	3	Major Elective
	Elective	Student choice	3	Gen. Ed. Theme 6 or 7 or 8 or 9 or 10 or 11		Elective	Student choice	3	Free Elective
						Elective	Student choice	3	Free Elective
						Elective	Student choice	3	Major Elective
						Elective	Student choice	3	Major Elective
						Elective	Student choice	3	Major Elective