

Four Years Curriculum (Total: 122 Credits)

Year One

First Semester

Course Code	Course Title	Credit
CHEM 101	Introduction to Chemistry	3
ENGL 101	English Communication Skills I	3
MATH 101	Calculus I	3
PHYS 111	Fundamentals of Physics I	3
PHYS 112	Fundamentals of Physics I Lab	1
	Free Elective 1	3

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Second Semester

Course Code	Course Title	Credit
CHEM 103	General chemistry	3
CHEM 104	General Chemistry Lab	1
ENGL 102	English Communication Skills II	3
MATH 103	Calculus II	3
PHYS 113	Fundamentals of Physics II	3
PHYS 114	Fundamentals of Physics II Lab	1

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Year Two

Third Semester

Course Code	Course Title	Credit
CHEM 201	Advanced General Chemistry	3
CHEM 211	Organic Chemistry I	3
CHEM 212	Organic Chemistry I Lab	1
ENGL 203	English Communication Skills III	3
MATH 211	Linear Algebra	3
CSIS 101	Computer Literacy	3

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Fourth Semester

Course Code	Course Title	Credit
CHEM 205	Analytical Chemistry	3
CHEM 206	Analytical Chemistry Lab	1
CHEM 213	Organic Chemistry II	3
CHEM 214	Organic Chemistry II Lab	1
ENGL 204	Language, Society and Culture	3
LISP 200	Library Use and Research methods	1
	Free Elective 2	3

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Year Three**Fifth Semester**

Course Code	Course Title	Credit
CHEM 221	Statistical Mechanics and Thermodynamics	3
CHEM 301	Inorganic Chemistry I	3
CHEM 311	Applied Molecular Spectroscopy	3
ISLM 101	Islamic Cultural Studies	3
	Free Elective 3	3

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Sixth Semester

Course Code	Course Title	Credit
CHEM 321	Physical & Chemical Kinetics	3
CHEM 322	Physical Chemistry Lab	1
CHEM 303	Inorganic Chemistry II	3
SOCL 201	UAE Studies	3
	Free Elective 4	3
	Free Elective 5	3

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Year Four**Seventh Semester**

Course Code	Course Title	Credit
CHEM 305	Instrumental Analysis	3
CHEM 323	Quantum theory and structure of matter	3
ENTR 201	Entrepreneurship and Innovation	3
	Free Elective 6	3
	Free Elective 7	3

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Eighth Semester

Course Code	Course Title	Credit
CHEM 399	B.S. Project in Chemistry	3
	Free Elective 8	3
	Free Elective 9	3
	Free Elective 10	3
	Free Elective 11	3

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