

Four Years Curriculum (Total: 121 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 Laboratory	1

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Second Semester

Course Code	Course Title	Credit
CHEM 103	General Chemistry	3
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 Laboratory	1
	Free Elective 1	3

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Year Two

Third Semester

Course Code	Course Title	Credit
CHEM 205	Analytical Chemistry I	3
ENGL 203	English Communications Skills III	3
MATH 201	Calculus III	3
PHYS 201	Instrumentation Laboratory	1
PHYS 221	Classical Mechanics	3
PHYS 243	Circuit Analysis I	3

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Fourth Semester

Course Code	Course Title	Credit
ENGL 204	Language, Society and Culture	3
LISP 200	Library Use and Research methods	1
MATH 211	Linear Algebra I	3
MATH 271	Elementary Differential Equations	3
PHYS 231	Thermodynamics	3
PHYS 255	Modern Physics	3

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Year Three

Fifth Semester

Course Code	Course Title	Credit
CSIS 206	Principles of Programming	3
ISLM 101	Islamic Cultural Studies	3
PHYS 341	Electricity and Magnetism	3
PHYS 323	Quantum Physics	3
	Free Elective 2	3

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Sixth Semester

Course Code	Course Title	Credit
SOCL 201	UAE Studies	3
PHYS 331	Thermal and Statistical Physics	3
PHYS 345	Modern Optics	3
	Free Elective 3	3
	Department Elective 1	3

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Year Four**Seventh Semester**

Course Code	Course Title	Credit
ENTR 201	Entrepreneurship and Innovation	3
PHYS 361	Special Relativity	3
PHYS 381	Atomic and Molecular Physics	3
	Free Elective 4	3
	Department Elective 2	3

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Eighth Semester

Course Code	Course Title	Credit
PHYS 383	Nuclear Physics	3
PHYS 385	Particle Physics	3
	Free Elective 5	3
	Free Elective 6	3
	Department Elective 3	3

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