

Chemistry

Chemistry Degrees and Certificates

THE CHEMISTRY MAJOR (BA OR BS)

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SUMMARY OF REQUIREMENTS FOR A MAJOR IN CHEMISTRY LEADING TO A BACHELOR OF SCIENCE DEGREE

Item #	Title	Credits
CHM 105	Introduction to Chemistry	4
CHM 110	General Chemistry I	4
CHM 120	General Chemistry II	4
CHM 210	Organic Chemistry I	4

CHM 220	Organic Chemistry II	4
CHM 302	Instrumental Analysis	4
CHM 350	Chemical Thermodynamics and Kinetics	4
CHM 360	Quantum Chemistry and Spectroscopy	4
CHM 370	Junior Seminar	1
CHM 413	Advanced Inorganic Chemistry	4
CHM 490	Senior Seminar	1
MTH 210	Calculus I	4
MTH 220	Calculus II	4
PHY 240	Fundamentals of Physics I	3
PHY 241	Fundamentals of Physics I Laboratory	1
PHY 250	Fundamentals of Physics II	3
PHY 251	Fundamentals of Physics II Laboratory	1
	Chemistry Elective (3-4 credits)	3 - 4
	Core Curriculum Requirements	44 - 48
	Sub-Total Credits	97-101

SUMMARY OF REQUIREMENTS FOR A MAJOR IN CHEMISTRY LEADING TO A BACHELOR OF ARTS DEGREE

Item #	Title	Credits
CHM 105	Introduction to Chemistry	4
CHM 110	General Chemistry I	4
CHM 120	General Chemistry II	4
CHM 210	Organic Chemistry I	4
CHM 220	Organic Chemistry II	4
CHM 302	Instrumental Analysis	4
CHM 350	Chemical Thermodynamics and Kinetics	4
CHM 370	Junior Seminar	1
CHM 490	Senior Seminar	1
MTH 210	Calculus I	4

General Physics or Fundamentals of Physics	8
Chemistry Elective (3-4 credits)	3 - 4
Core Curriculum Requirements	44 - 48
Sub-Total Credits	85-89

CATEGORY DESCRIPTIONS

Chemistry Elective (3-4 credits)

Select one of the following:

Item #	Title	Credits
CHM 224	Quantitative Analysis	4
CHM 304	Environmental Chemistry	4
CHM 356	Biochemistry	4
CHM 482	Topics in Chemistry	3

Core Curriculum Requirements

Developmental requirements (up to 6 credits):

Taken in the first semester, if placed into it:

- ENG 001 College English

Taken in the first year, if placed into it:

- MTH 001 Intermediate Algebra

Proficiency requirements (15 credits):

Taken in the first two years, if not placed out of it:

- MTH 101 College Algebra **or**
- MTH 103 College Algebra w/Lab **or**
- MTH 105 Mathematics for Liberal Arts

Taken in the first year (depending on placement):

- ENG 101 English Composition I (taken immediately if placed into it or immediately following completion of ENG 001 with a grade of 'C' or better)
- ENG 102 English Composition II (taken immediately following successful completion of ENG 101 with a grade of 'C' or better)

Recommended but not required in the first year:

- First-year of a foreign language

Common Core requirements (13-14 credits):

Taken in the first year (or within one year of completing any pre-requisite coursework):

- COR 100 Year One
- COR 101 Year One OH ONE

Taken anytime in the first TWO years:

- ENG 105 World Literature
- POL 105 The American Experience

Taken anytime prior to graduation:

- HIS 110 World Civilization
- HIS 112 World Civilization II

Distribution requirements:

One fine arts course (3 credits)

Select from the following:

- ART 101 Introduction to Visual Arts
- ART 201, 202 World Art I and II
- MUS 105 Language of Music
- MUS 110 Music Theory
- THE 101 Introduction to Theatre

One social science course (3 credits)

Select from the following:

- ANT 101 Introduction to Cultural Anthropology
- ECO 101 Principles of Economics I
- PSY 101 Introduction to Psychology

One mathematics course (3-4 credits)

Select from the following:

- MTH 105 Mathematics for Liberal Arts

- MTH 110 Elementary Functions
- MTH 115 Discrete Mathematics **or** MTH 290 Foundations of Modern Mathematics
- ECO 208 Quantitative Methods in Business, Economics, and Decision Science
- MTH 210 Calculus I
- BUS 323 Statistical Applications to Business Decision Making
- PSY 235 Statistics for the Behavioral Sciences

One lab science course (4 credits)

Select from the following:

- BIO 100, 100L Biology in Context
- BIO 110, 110L Principles of Biology I
- CHM 105, 105L Introduction to Chemistry
- CHM 110, 110L General Chemistry I
- PHY 210, 211 General Physics
- PHY 240, 241 Fundamentals of Physics
- SCI 100, 100L Physical Science for Liberal Arts

One religion/philosophy course (3 credits)

Select from the following:

- RPH 110 Old Testament
- RPH 120 New Testament
- RPH 130 Introduction to Christian Theology
- RPH 140 Introduction to World Philosophies
- RPH 150 World Religions
- RPH 205 Introduction to Ethics

Two physical education courses (0-2 credits)

Select from the following:

- PED courses with designations from 101 to 130
- OLP courses with designations from 120 to 130

NOTE: Only one activity (specified PED/OLP) course can be taken per semester. Additionally, only seven activity credits can be counted toward the graduation requirement.

General Physics or Fundamentals of Physics

Select one of the following course sequences:

GENERAL PHYSICS

Item #	Title	Credits
PHY 210	General Physics I	3
PHY 211	General Physics I Laboratory	1
PHY 220	General Physics II	3
PHY 221	General Physics II Laboratory	1

FUNDAMENTALS OF PHYSICS

Item #	Title	Credits
PHY 240	Fundamentals of Physics I	3
PHY 241	Fundamentals of Physics I Laboratory	1
PHY 250	Fundamentals of Physics II	3
PHY 251	Fundamentals of Physics II Laboratory	1

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SUMMARY OF REQUIREMENTS FOR A MINOR IN CHEMISTRY

Item #	Title	Credits
CHM 105	Introduction to Chemistry	4
CHM 110	General Chemistry I	4
CHM 120	General Chemistry II	4
CHM 210	Organic Chemistry I	4
CHM 220	Organic Chemistry II	4
	CHM 224 OR CHM 302	4
	Chemistry Elective (300 level or above)	3 - 4
	Sub-Total Credits	23-28

Total credits:	23-28
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CATEGORY DESCRIPTIONS

CHM 224 OR CHM 302

Select one of the following:

Item #	Title	Credits
CHM 224	Quantitative Analysis	4
CHM 302	Instrumental Analysis	4

Chemistry Elective (300 level or above)

Select one chemistry course at the 300 level or above to fulfill this elective.

Chemistry (CHM) Classes

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CHM 120: General Chemistry II

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CHM 182: Topics in Chemistry

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CHM 210: Organic Chemistry I

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CHM 220: Organic Chemistry II

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CHM 224: Quantitative Analysis

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CHM 280: Introduction to Chemical Research

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CHM 302: Instrumental Analysis

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CHM 304: Environmental Chemistry

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CHM 350: Chemical Thermodynamics and Kinetics

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CHM 356: Biochemistry

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CHM 360: Quantum Chemistry and Spectroscopy

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CHM 390: Internship in Chemistry

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CHM 399: Chemistry International Studies Course: Variable Topics

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CHM 413: Advanced Inorganic Chemistry

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CHM 425: Advanced Biochemistry

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CHM 450: Directed Study

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CHM 480: Directed Research

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CHM 482: Topics in Chemistry

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