

Degree: Bachelor of Science

College: Science, Technology, & Business

Major: Chemistry

Major Code: CHEM
Concentration: Forensic Science (FORS)

Minor: N/A

Credits Required: 122

Minor Code: N/A

General Education

Foundations: (13 Credits)
Oral Communication (3 Credits)
Quantitative Reasoning (4 Credits)
☐ MATH 2410 College Composition
Technological Literacy (3 Credits)
Written Communication (3 Credits)
☐ ENGL 1200 College Composition
<u>Discoveries:</u> (Credits 29) At least two (2) disciplines must be represented within each of the three (3) categories.
Art/Humanities (9 Credits)
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Natural Sciences & Technology 11 Credits) CHEM 1108 General Chemistry I
☐ MATH 2420 Analytical Geometry & Calculus II
Social Sciences (9 Credits) ANTH 1000 Introduction to Anthropology
Elective/Wellness & Personal Health: (4 Credits) CHEM 1128 General Chemistry II
Competencies: Applied Methodologies
☐ CHEM 1128 General Chemistry IIEthical Reasoning☐
Information Literacy
☐ CHEM 3010 Chemistry Career & Prof Development II
Intercultural Fluency
☐ Keystone Experience
☐ CHEM 4900 Chemistry Capstone
Quantitative Applications
☐ CHEM 1108 General Chemistry I
Writing Intensive - Two (2) courses are required
☐ CHEM 2205 Organic Chemistry I Laboratory☐ CHEM 4605 Biochemistry I Laboratory

Program Requirements

Required Major Courses: (46-48 Credits)
□ PHYS 1500/10 General Physics I□ ~Or~ PHYS 2500/10 University Physics I
□ PHYS 1600/10 General Physics II□ ~Or~ PHYS 2600/10 University Physics II
$\ \ \square$ CHEM 2010 Chemistry Career and Professional Development I
 ☐ CHEM 2200 Organic Chemistry I ☐ ~And~ CHEM 2205 Organic Chemistry I Laboratory
☐ CHEM 2250 Organic Chemistry II
~And~ CHEM 2255 Organic Chemistry II Laboratory~Or~ CHEM 4115 Advanced Chemistry Laboratory
$\ \Box$ CHEM 3010 Chemistry Career and Professional Development II
 ☐ CHEM 3300 Inorganic Chemistry I ☐ ~And~ CHEM 3305 Inorganic Chemistry I Laboratory ☐ ~Or~ CHEM 3315 Intermediate Chemistry I Laboratory
 ☐ CHEM 3400 Quantitative Chemical Analysis ☐ ~And~ CHEM 3405 Quantitative Chemical Analysis Laboratory ☐ ~Or~ CHEM 3415 Intermediate Chemistry II Laboratory
☐ CHEM 3450 Instrumental Analysis
☐ CHEM 3455 Instrumental Methods Laboratory
 ☐ CHEM 4500 Physical Chemistry I ☐ ~And~ CHEM 4505 Physical Chemistry I Laboratory ☐ ~Or~ CHEM 4515 Intermediate Chemistry III Laboratory
 ☐ CHEM 4600 Biochemistry I ☐ ~And~ CHEM 4605 Biochemistry I Laboratory
☐ CHEM 4700 Forensic Analysis
☐ CHEM 4900 Chemistry Capstone
Required Concentration Courses: (25 Credits)
☐ BIOL 1900 Intro to Cell and Molecular Biology
☐ BIOL 2202 Genetics
☐ BIOL 3330 Cell Biology
☐ BIOL 4320 Molecular Biology
☐ CRJ 1050 Intro to Forensic Science
☐ CRJ 4850 Forensic Law
☐ STAT 2020 Elements of Statistics
Free Electives: (6 Credits)

Created: 8/15/2024

Suggested Four Year Course Sequence

Year 1

Fall Semester

BIOL 1900 Intro Cell & Molec Biology CHEM 1108 General Chemistry I CRJ 1050 Intro to Forensic Sciences MATH 1410/1230 Pre-calculus or Trigonometry

Spring Semester

ANTH 1000 Intro to Anthropology
CHEM 1128 General Chemistry II
ENGL 1200 English Composition
MATH 2410 Calculus I
General Education Foundation - Technological Literacy^

Year 3

Fall Semester

BIOL 3330 Cell Biology
CHEM 4600 Biochemistry I

~And~ CHEM 4605 Biochemistry I Lab
PHYS1500/2500 Physics I*

~And~ PHYS 1510/2510 Physics I Lab*
STAT 2020 Elements of Statistics
General Education - Discoveries - Arts & Humanities^

Spring Semester

CHEM 3010 Chem Car Prof Dev II
CHEM 3450 Instrumental Methods
~And~ CHEM 3455 Instrumental Methods Lab
CHEM 4115 Advanced Chemistry Lab
PHYS 1600/2600 Physics II*
~And~ PHYS 1610/2610 Physics II Lab*
Minor Requirement/Elective
General Education - Discoveries - Natural Sci & Tech^

Notes:

^Select General Education courses through faculty advisement.

Year 2

Fall Semester

CHEM 2200 Organic Chemistry I

~And~ CHEM 2205 Organic Chemistry I Lab

CHEM 3400 Quant Chemistry Analysis

~And~ CHEM 3405 Quant Chemistry Analysis. Lab

~Or~ CHEM 3415 Int Chemistry Lab II

MATH 2420 Calculus II

General Education Foundation - Oral Communication^

Spring Semester

BIOL 2202 Genetics
CHEM 2010 Chemistry Career & Prof Development I
CHEM 2250 Organic Chemistry II
~And~ CHEM 2255 Organic Chemistry II Lab
~Or~ CHEM 4115 Advanced Chemistry Lab
CHEM 3300 Inorganic Chemistry I
~And~ CHEM 3305 Inorganic Chemistry I Lab
~Or~ CHEM 3315 Intermediate Chemistry Lab

Year 4

Fall Semester

CHEM 4500 Physical Chemistry I

~And~ CHEM 4505 Physical Chemistry I Lab

~Or~ CHEM 4515 Intermediate Lab

CRJ 4850 Forensic Law

Minor/Elective Requirement

General Education - Discoveries - Arts & Humanities^

General Education - Discoveries - Social Sciences^

Spring Semester

BIOL 4320 Molecular Biology CHEM 4700 Forensic Analysis CHEM 4900 Chemistry Capstone General Education - Discoveries - Arts & Humanities^ General Education - Discoveries - Social Sciences^



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^{*}Strongly advise PHYS2500/10 and PHYS2600/10 series.