

Degree: BS **Credits Required: 122**

College: College of Science, Technology & Business

Major: Chemistry Major Code: CHEM

Minor: N/A **Concentration:** Forensic Science (FORS) Minor Code: N/A

General Education

General Education	Program Requirements
Foundations: (13 Credits)	Required Major Courses: (46-48 Credits)
Oral Communication (3 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
Written Communication (3 Credits) ☐ ENGL 1200 College Composition	☐ CHEM 2010 Chemistry Career and Professional Development I
Quantitative Reasoning (4 Credits)	☐ CHEM 2200 Organic Chemistry I
☐ MATH2410 Analytical Geometry and Calculus I	☐ CHEM 2205 Organic Chemistry I Laboratory
Technological Literacy (3 Credits)	☐ CHEM 2250 Organic Chemistry II
	☐ CHEM 2255 Organic Chemistry II Laboratory OR CHEM 4115
Discoveries: (Credits 29)	Advanced Chemistry Laboratory
Art/Humanities (9 Credits)	☐ CHEM 3010 Chemistry Career and Professional Development II
	☐ CHEM 3300 Inorganic Chemistry I
	☐ CHEM 3305 Inorganic Chemistry I Laboratory OR CHEM 3315
	Intermediate Chemistry I Laboratory
Social Sciences (9 Credits)	☐ CHEM 3400 Quantitative Chemical Analysis
☐ ANTH 1000 Introduction to Anthropology	\square CHEM 3405 Quantitative Chemical Analysis Laboratory OR
	CHEM 3415 Intermediate Chemistry II Laboratory
	CHEM 3450 Instrumental Analysis
Natural Sciences & Technology (11 Credits)	CHEM 3455 Instrumental Methods Laboratory
CHEM 1108 General Chemistry I	☐ CHEM 4500 Physical Chemistry I
☐ MATH 2420 Analytical Geometry and Calculus II	CHEM 4505 Physical Chemistry I Laboratory OR CHEM 4515
	Intermediate Chemistry III Laboratory
	☐ CHEM 4600 Biochemistry I
Program Elective: (4 Credits)	☐ CHEM 4605 Biochemistry I Laboratory
☐ CHEM 1128 General Chemistry II	☐ CHEM 4700 Forensic Analysis
	☐ CHEM 4900 Chemistry Capstone
Competencies: Quantitative Applications	, '
☐ CHEM 1108 General Chemistry I	Required Concentration Courses: (25 Credits)
Applied Methodologies	☐ BIOL 1900 Intro to Cell and Molecular Biology
☐ CHEM 1128 General Chemistry II	☐ BIOL 2202 Genetics
Intercultural Fluency	☐ BIOL 3330 Cell Biology
Ethical Reasoning	☐ BIOL 4320 Molecular Biology
	☐ CRJ 1050 Intro to Forensic Science
Information Literacy ☐ CHEM 3010 Chemistry Career and Professional Development II	☐ CRJ 4850 Forensic Law
Writing Intensive	☐ STAT 2020 Elements of Statistics
☐ CHEM 2205 Organic Chemistry I Laboratory	
Writing Intensive	Free Electives: (6 Credits)
☐ CHEM 4605 Biochemistry I Laboratory Keystone Experience	
☐ CHEM 4900 Chemistry Capstone	

Suggested Four Year Course Sequence

Year 1

Fall Semester

BIOL1900 Intro Cell & Molec Biology CHEM1108 General Chemistry I ENGL1200 College Composition MATH1410 Pre-calculus*

Spring Semester

BIOL2202 Genetics CHEM1128 General Chemistry II MATH2410 Analyt Geom & Calculus I GenEd Foundation- Oral Communication GenEd Foundation- Tech Literacy

Year 3

Fall Semester

BIOL3330 Cell Biology CHEM3400 Quant Chem Analysis CHEM3405 Quant Chem Analys. Lab OR CHEM3415 Int Chemistry Lab II STAT2020 Elements of Statistics GenEd Discoveries GenEd Discoveries

Spring Semester

CHEM3010 Chem Car Prof Dev II CHEM3450 Instrumental Analysis CHEM3455 Instrumental Analysis Lab CHEM4500 Physical Chemistry I CHEM4505 Physical Chemistry I Lab OR CHEM4515 Int Chemistry Lab III GenEd Discoveries Minor Requirement/Elective

NOTE: *MATH1410 Pre-calculus is an elective course for students not prepared to take MATH2410 in semester 1. If a student is prepared for MATH2410, they can take that in semester 1.

Year 2

Fall Semester

CHEM2200 Organic Chemistry I CHEM2205 Organic Chemistry I Lab CHEM2010 Chem Car Prof Dev I MATH2420 Analyt Geom & Calculus II PHYS1500/2500 Physics I PHYS1510/2510 Physics I Lab GenEd Discoveries

Spring Semester

CHEM2250 Organic Chemistry II
CHEM2255 Organic Chemistry II Lab OR CHEM4115 Adv
Chem Lab
CHEM3300 Inorganic Chemistry I
CHEM3305 Inorg Chem I Lab OR
CHEM3315 Interm Chem Lab I
CRJ1050 Intro Forensic Science
PHYS2500/2600 Physics II
PHYS2510/2610 Physics II Lab

Year 4

Fall Semester

ANTH1000 Intro to Anthropology BIOL4320 Molecular Biology CHEM4600 Biochemistry I CHEM4605 Biochemistry I Lab Research or Advanced Lab (as needed) Minor Requirements/Elective GenEd Discoveries

Spring Semester

CHEM4700 Forensic Analysis
CHEM4900 Chemistry Capstone
CRJ4850 Forensic Law
Research or Advanced Lab (as needed)
Minor Requirements/Elective
General Education Discoveries

