

B.S. in Chemistry: Concentration in Analytical Chemistry
American Chemical Society Certified Degree
 Effective Fall, 2018

Chemistry (CHEM) (46 credits)

General Chemistry lecture and lab	□ 211 (3)	□ 213 (1)	□ 212 (3)	□ 214 (1)
Organic Chemistry lecture and lab	□ 313 (3)	□ 315(2)	□ 314 (3)	□ 318 (2)
Quantitative Chemical Analysis	□ 321 (4)			
Physical Chemistry lecture and lab	□ 331 (3)	□ 336 (2)	□ 332 (3)	□ 337 (2)
Instrumental Methods of Chemical Analysis and Lab	□ 422 (3)	□ 423 (2)		
Prop. and Bonding of Inorganic Compounds	□ 441 (3)			
General Biochemistry I	□ 463 (4)			
Inorganic Preparations and Techniques Lab	□ 445 (2)	-or-	Biochemistry Lab	□ 465 (2)

Chemistry Electives (CHEM) (6 credits)

Principles of Chemical Separation [prereq: CHEM 332 or 442; Spring, even years]	□ 424 (3)	-or-	Electroanalytical Chemistry [prereq: CHEM 332 or 442; Fall, odd years]	□ 425 (3)
Aquatic Environmental Chemistry [Spring, even years]	□ 427 (3)	-or-	Undergraduate research	□355 or 451 or 452 (3)

Analytical Area Courses (6 credits)

Introduction to Bioengineering	□ BENG 101 (3)	-or-	Introductory Statistics	□ STAT 250 (3)
Intro. to Electrical & Computer Engineering	□ ECE 101 (3)	-or-	Modern Instrumentation	□ CHEM 620 (3)

Mathematics (MATH) (11 credits)

Analytic Geometry and Calculus	□ 113 (4) (-or- 123-124)	□ 114 (4)	□ 213 (3)
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Physics (PHYS) (8 credits)

University Physics lecture and lab	□ 160 (3)	□ 260 (3)	□ 161 (1)	□ 261 (1)
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Biology (BIOL) (4 credits)

Cell Structure and Function	□ 213 (4)
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Mason Core (30 credits) (approved courses are listed in the University Catalog)

Written Communication	□ ENGH 101 (3)	-and-	□ ENGH 302 (3)
Oral Communication	□ COMM 100 -or- 101 (3)		
Western Civilization/World History	□ HIST 100 -or- 125 (3)		
Information Technology	□ CDS 130 (3)		
Literature	□ ____ (3)		
Fine Arts	□ ____ (3)		
Social and Behavioral Sciences	□ ____ (3)		
Global Understanding	□ ____ (3)		
Synthesis	□ ____ (3)		

Electives (9 credits)

From any area	□ ____
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TOTAL CREDITS REQUIRED: 120 Minimum (of which 45 must be upper-division ≥ 300 level); overall GPA ≥ 2.00; major requirements GPA ≥ 2.30; maximum of two courses of CHEM with a "D" grade. **All CHEM prerequisite courses require a grade of C or better.** 12/1/17