



# Chemistry, B.S. *major*

## Environmental Chemistry Emphasis

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- GEOL 3211 Environmental Hydrology (3 credits)

Required Credits: 69

Required GPA: 2.25

### I REQUIRED COURSES

SELECT 1 OF THE FOLLOWING COURSES:

- CHEM 1111 General Chemistry I (4 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)

COMPLETE THE FOLLOWING COURSES:

- CHEM 2212 Principles of Chemistry II (4 credits)
- CHEM 3100 Journal Club (1 credit)
- CHEM 3311 Organic Chemistry I (3 credits)
- CHEM 3312 Organic Chemistry II (3 credits)
- CHEM 3371 Organic Chemistry Laboratory I (1 credit)
- CHEM 3372 Organic Chemistry Laboratory II (1 credit)
- CHEM 3507 Analytical Chemistry (3 credits)
- CHEM 3570 Analytical Chemistry Laboratory (1 credit)
- CHEM 4510 Instrumental Methods of Analysis (3 credits)
- CHEM 4571 Instrumental Analysis Laboratory I (1 credit)
- CHEM 4572 Instrumental Analysis Laboratory II (1 credit)
- MATH 2471 Calculus I (5 credits)
- PHYS 2101 Physics I (4 credits)

### II REQUIRED EMPHASIS

COMPLETE ONE OF THE FOLLOWING COURSES:

- CHEM 4110 Environmental Chemistry (3 credits)  
*or* ENVR 4110 Environmental Chemistry (3 credits)

COMPLETE 4 SEMESTER CREDITS FROM THE FOLLOWING COURSE:

- CHEM 4970 Internship (3-4 credits)

### II REQUIRED EMPHASIS

Select 3 semester credits of electives from CHEM 3100 or above. (CHEM 3100 may be repeated with 1 credit applying to this area.)

SELECT 24 SEMESTER CREDITS FROM THE FOLLOWING COURSES:

- BIOL 2610 General Ecology (3 credits)
- BIOL 3361 Limnology (4 credits)
- CHEM 3140 Chemical Toxicology (3 credits)
- CHEM 3150 Standard Methods of Water Analysis (3 credits)  
*or* ENVR 4220 Sampling and Analysis (4 credits)
- CHEM 4411 Biochemistry I (3 credits)
- CHEM 4412 Biochemistry II (3 credits)
- CHEM 4471 Biochemistry Laboratory I (1 credit)
- ENVR 4050 Geochemistry (3 credits)
- ENVR 4200 Wastewater Treatment (3 credits)
- ENVR 4240 Waste Management (4 credits)
- ENVR 4260 Risk, Resilience and Sustainable Community Development (3 credits)
- ENVR 4400 Environmental Microbiology (3 credits)
- ENVR 4500 Environmental Toxicology (4 credits)