

Chemistry Major: Environmental Chemistry Option

(74 credits)

Ch 221, 222, 223 General Chemistry (15)

Ch 312 Quantitative Analysis (4)

Ch 313W Instrumental Analysis (4)

Ch 334, 335, 336 Organic Chemistry (9)

Ch 337 Organic Chemistry Lab I (1)

Ch 338 Organic Chemistry Lab II (2)

Ch 340 Elementary Physical Chemistry (4)

Ch 350W Chemical Literature (1)

Ch 371 Environmental Chemistry (3)

Ch 407W Seminar (1)

Ch 412 Inorganic Chemistry of the Environment (4)

Ch 461W, 462W Experimental Chemistry (4)

Ch 450 Biochemistry (3)

BI 211, 212, 213 Principles of Biology (15)

MTH 243 Introduction to Probability and Statistics (4)

The B.A. requires MTH 252, CS 121 or 161 and completion of the third term of the second year of a modern language. The B.S. requires a combined 12 credit hours of courses work in mathematics and computer science including MTH 252 and CS 121 or 161. For this major the six hours of writing intensive course work should come from CH 350 W, Ch 407W, Ch 461 W, CH 462 W. The sequence PH 201, 202, 203 or PH 211, 212, 213 is to be completed as the LACC science requirement. GEOG 105 Introductory Geography is to be taken as part of the Social Science component of the LACC. This major requires completion of the Environmental Science Minor.

**Environmental Sciences Minor:
(27-29 credits)**

CH 310 Environmental Geochemistry (3)
CH 361 Energy, Resources and the Environment (3)
ES 201, 202 Principles of Geology (8)
ES 473 Environmental Geology (4)

Choose one course from the following:

ES 341 Fundamentals of Geographic Information Systems (4)

-or-

GEOG 341 Geographic Information Systems (4)

-or-

ES 492 GIS Applications in Earth Science (3)

Electives: Choose 6-7 hr from the following list:

BI 357 General Ecology (4)

BI 331 General Microbiology (4)

BI 361 Marine Ecology (5)

CH 161 Fundamentals of Photography for Forensic Science (1)

CH 345 Introduction to Toxicology (3)

CH 360 Nuclear Chemistry (3)

CH 401 Research (1-3)

CH 409 Practicum (1)

ES 331 Introduction to Oceanography (3)

ES 460 Energy and Mineral Resources (3)

ES 476 Hydrology (3)

ES 492 GIS Applications in Earth Science (3)

GEOG 393 Soils Geography (4)

This minor is available to non-chemistry students. If an Earth Science major selects this minor ES 201, 202 and 473 will be replaced with Ch 223, Ch 371 and one additional science course approved by an advisor. If a Biology major chooses this minor, Ch 371 will be the required elective.