

Environmental Science, Chemistry Concentration
 Department of Earth & Atmospheric Sciences, 303-615-1177, Science Room 2028
 College of Letters, Arts, and Sciences

Catalog
2020-2021

This sheet applies to the 2020-21 catalog *only*. It does not replace the full catalog as an official statement of requirements. Students with declared majors *must* work with an advisor on course selection and sequencing to ensure a timely graduation.

General Studies	33 min
Environmental Science Required Courses	26
Chemistry Requirements	40
Restricted Electives	<u>21</u>
Total to Graduate (Min. 40 hrs. Upper-Division)	120 min

General Studies Course Requirements

Written Communication (min. 6 credits)

- _____ ENG 1010 Composing Arguments
- _____ ENG 1020 Freshman Comp: Analysis, Research, & Doc.

Oral Communication (min. 3 credits)

Quantitative Literacy (min. 3 credits)

- _____ See required pre-requisites*

Arts and Humanities (min. 6 credits)

Historical (min. 3 credits)

Natural and Physical Sciences (min. 6 credits)

- _____ See required pre-requisites*

Social and Behavioral Sciences I (min. 3 credits)

Social and Behavioral Sciences II (min. 3 credits)

Global Diversity

- _____ May be satisfied within General Studies (GD code)

Multicultural Requirement

- _____ May be satisfied within General Studies (MC code)

Environmental Science Required Pre-Requisites*

	Credits
_____ BIO 1080 General Biology I (Co: BIO 1090)	3
_____ BIO 1090 General Biology Laboratory I (Co: BIO 1080)	1
_____ BIO 1081 General Biology II (Preq. BIO 1080/1090; Co: BIO 1091)	3
_____ BIO 1091 General Biology Laboratory II (Preq. BIO 1080/1090; Co: BIO 1081)	1
_____ CHE 1800 General Chemistry I (Preq. at least MTH 1110)	4
_____ CHE 1801 General Chemistry Laboratory I (Preq. Or Co. CHE 1800)	1
_____ CHE 1810 General Chemistry II (Preq. CHE 1800)	4
_____ CHE 1811 General Chemistry Laboratory II (Preq. or Co. CHE 1810)	1
_____ GEG 1100 Physical Geography OR GEL 1010 Physical Geology	3-4
_____ MTH 1410 Calculus I (Preq. MTH 1110 & 1120)	4

Environmental Science Required Core Courses **ENV** **Credits**

1200 Intro to Environmental Science	3
_____ GIS 1220 Introduction to Geospatial Sciences (MTH 1110 Recommended)	3
_____ GIS 2250 Geographic Information Systems (Preq. GIS 1220)	3
_____ CET 3320 Environmental Impact Statements (Preq. Jr Status)	3
_____ MTH 1210 Intro to Statistics	4
_____ MTH 3240 Environmental Statistics (Preq. MTH 1210 & MTH 1110 or MTH 1112)	4
_____ ENV 4200 Environmental Policy & Planning (Preq. ENV 1200)	3
_____ ENV 4950 ENV Internship (optional – override needed, see advisor) (Preq. 12 credits UD ENV & Jr. Status)	3

<u>Environmental Chemistry Required Courses</u>	<u>Credits</u>
____ ENV 2000 Applied Pollution Science (<i>Preq. ENV 1200, CHE 1800, CHE 1810</i>)	3
____ CHE 3000 Analytical Chemistry (<i>Preq. CHE 1810/1811</i>)	3
____ CHE 3010 Analytical Chemistry Laboratory (<i>Preq. CHE 1810/1811, Preq. or Co: CHE 3000</i>)	2
____ CHE 3050 Environmental Chemistry (<i>Preq. CHE 1810/ 1811, CHE 3100</i>)	3
____ CHE 3100 Organic Chemistry I (<i>Preq. CHE 1810/1811</i>)	4
____ CHE 3120 Organic Chemistry Laboratory I (<i>Preq. CHE 1810/1811, Preq. or Co: CHE 3100 or CHE 3090</i>)	1
____ CHE 3110 Organic Chemistry II (<i>Preq. CHE 3120</i>)	3
____ CHE 3130 Organic Chemistry Laboratory II (<i>Preq. CHE 3100 & CHE 3120, Preq. or Co: CHE 3110</i>)	2

Environmental Science/ Geology Electives (min. 12 credits)

____ ENV 2000:4999 Any ENV course taught at MSU (<i>Preq. See catalog for pre-requisites</i>)	
____ GEL 1010 Physical Geology– (if not taken in pre-reqs*)	4
____ GEL 3000:4999 Any UD Geology course taught at MSU (<i>Preq. See catalog for pre-requisites</i>)	1-4

Senior Experience Requirement (min. 3 credits)

____ ENV 4970 Environmental Field Studies (<i>Preq. 12 UD credits of ENV, GEG, GEL, or MTR & Sr. Status</i>)	3
____ ENV 4960 Global Environmental Challenges (<i>Preq. 12 UD credits of ENV, GEG, GEL, or MTR & Sr. Status</i>)	3
____ BIO 4510 Microbial Ecology (<i>Preq. BIO 2400 & 6 cr. Of UD micro/molecular BIO & Sr. Status</i>)	4
____ CHE 4950 Senior Experience in Chemistry (<i>Preq. CHE 3000, CHE 3110, & CHE 3190 or CHE 3250 & Sr. Status</i>)	3

The degree is an extended major that does not require a minor.

Need to total a minimum of 120 credits for a bachelor's degree