

# ACADEMIC ROADMAP

B.S. GEOLOGY

Fall 2023

## Freshman Year (31 credits)

### FIRST SEMESTER

Course Title	Catalog Number	Prerequisite(s)
College Writing I	CWP 101	
Physical Geology	GES 201	
General Education course: Environmental Earth Science	GES 123	
General Education course: Ethics for Scientists or Environmental Ethics	PHI 111 or PHI 113	
Fundamentals of Chemistry I	CHE 111	
Laboratory for Fundamentals of Chemistry I	CHE 113	

### SECOND SEMESTER

Course Title	Catalog Number	Prerequisite(s)
Argumentation and Research	CWP 102	CWP 101
Earth and Environments Through Time	GES 202	
Fundamentals of Chemistry II	CHE 112	CHE 111
Laboratory for Fundamentals of Chemistry II	CHE 114	CHE 113
General Education course: Intro. to the Visual Arts	AAD 100	

### Notes and recommendations:

You should attend at least one faculty office hour, visit Academic Excellence Center (math, writing, and general tutoring), and view your degree audit sheet in [Degree Works](#) this year.

Get involved with the Astronomy and Geology Club.

Begin a conversation with a faculty member about their research and how you can be involved in it.

Get program and career advice from your Department faculty advisor and/or the Department Chair.

If you plan on [a career in Professional Geology](#), consult with the Department Chair.

## Sophomore Year (60 credits)

### THIRD SEMESTER

Course Title	Catalog Number	Prerequisite(s)
Mineralogy	GES 303	GES 201 / instructor permission
Environmental Biology or General Physics	BIO 104 or PHY 107	
All College Elective course: Environmental Geochemistry	GES 350	GES 201, upper division status / instructor permission
General Education course: Human Geography	GEG 102	
Mathematics I: Functions and Modelling II or Applied Calculus I or Calculus I	MAT 124 MAT 126 or MAT 161/163	MAT 114 MAT 114 / 4 years regents Math MAT 124

### FOURTH SEMESTER

Course Title	Catalog Number	Prerequisite(s)
Geomorphology	GES 307	GES 201 / instructor permission
Maps and Mapmaking Using GIS	GEG 325	
Meteorology	GES 241	
General Education course: Geography of the United States and Canada	GEG 362	Instructor permission

### Notes and recommendations:

Consider enrolling in a second major, minor, or certificate program, particularly the [Certificate program in Environmental Science and Society](#).

Talk with a faculty member about performing independent research with them.

Get program and career advice from your Department faculty advisor and/or the Department Chair.

If you plan on [a career in Professional Geology](#), consult with the Department Chair.

**Junior Year (93 credits)**

## FIFTH SEMESTER

Course Title	Catalog Number	Prerequisite(s)
Third-Year Research and Field Experience	GES 323	GES 201 / instructor permission
Igneous and Metamorphic Petrology	GES 401	GES 303 / instructor permission
General Education course: Anthropology of Food	ANT 361	ANT 101 / instructor permission
General Education course		

## SIXTH SEMESTER

Course Title	Catalog Number	Prerequisite(s)
Sedimentology and Stratigraphy	GES 306	GES 201 / instructor permission
Geological Hazards	GES 428	GES 306, GES 307, GES 408 / instructor permission
Fundamentals of GIS	GEG 425	GEG 325 / instructor permission
Mathematics II: Applied Calculus I or Applied Calculus II or Introductory Probability and Statistics or Calculus II	MAT 126 or MAT 127 or MAT 311  or MAT 162/164	MAT 114 / 4 years regents Math MAT 126 MAT 124  MAT 161/163
General Education course: Beginning Spanish I	SPA 101	

**Notes and recommendations:**

Visit the Career & Professional Education Center to discuss appropriate career options.

Talk with a faculty member about performing independent research with them.

Get program and career advice from your Department faculty advisor and/or the Department Chair.

If you plan on [a career in Professional Geology](#), consult with the Department Chair.

## Senior Year (122 credits)

### SEVENTH SEMESTER

Course Title	Catalog Number	Prerequisite(s)
Structural Geology	GES 408	GES 201 / instructor permission
Structural Geology Field Exp.	GES 418	GES 303 / instructor permission
All College Elective course: Geology Independent Research	GES 433	GES 323 / instructor permission
General Education course: Beginning Spanish II	SPA 102	SPA 101
All College Elective course		

### EIGHTH SEMESTER

Course Title	Catalog Number	Prerequisite(s)
Geology Senior Seminar	GES 472	Senior status / instructor perm.
Geology Internship	GES 488	Department approval
Hydrogeology	GES 452	GES 201 and another UD GES
All College Elective course: Environmental Geochemistry	GES 350	GES 201, upper-div. status
All College Elective course		

### Notes and recommendations:

Apply for graduation; apply to graduate school, if applicable; visit the Career & Professional Education Center to have your resume reviewed.

Get advice from your Department faculty advisor and/or the Department Chair.

If you plan on [a career in Professional Geology](#), consult with the Department Chair.