

ACADEMIC ROADMAP

B.S. EARTH SCIENCES

Fall 2023

Freshman Year (32 credits)

FIRST SEMESTER

| Course Title | Catalog Number | Prerequisite(s) |
|---|-----------------------|-----------------|
| College Writing I | CWP 101 | |
| Environmental Earth Science or Oceanography | GES 123 or GES 111 | |
| Physical Geology | GES 201 | |
| General Education course: Ethics for Scientists or Environmental Ethics | PHI 111 or PHI 113 | |
| General Education course: Beginning Spanish I | SPA 101 | |

SECOND SEMESTER

| Course Title | Catalog Number | Prerequisite(s) |
|--|-----------------------|-----------------|
| Argumentation and Research | CWP 102 | CWP 101 |
| Natural Hazards or The Solar System | GES 124 or GES 132 | |
| Earth and Environments Through Time | GES 202 | |
| General Education course: Intro. to the Visual Arts | AAD 100 | |
| General Education course: Beginning Spanish II | SPA 102 | SPA 101 |

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.

Get program and career advice from a faculty member and/or the Department Chair.

Sophomore Year (62 credits)

THIRD SEMESTER

| Course Title | Catalog Number | Prerequisite(s) |
|--|----------------|---------------------------------|
| Introductory Astronomy | GES 131 | |
| Mineralogy | GES 303 | GES 201 / instructor permission |
| Fundamentals of Chemistry I | CHE 111 | |
| Laboratory for Fundamentals of Chemistry I | CHE 113 | |
| General Education course | | |

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 Human Geography | GEG 102 | |
| General Education course | | |

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 a faculty member and/or the Department Chair.

If you are intending upon becoming an Earth Science teacher, consult with faculty in the [Science Education area](#).

Junior Year (93 credits)

FIFTH SEMESTER

| Course Title | Catalog Number | Prerequisite(s) |
|--|-----------------------|---------------------------------|
| Environmental Biology or General Physics | BIO 104 or PHY 107 | |
| Third-Year Research and Field Experience | GES 323 | GES 201 / instructor permission |
| General Education course: Geography of the United States and Canada | GEG 362 | |
| 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 |
| Mathematics: Functions and Modelling II or Applied Calculus I or Calculus I | MAT 124 or MAT 126 or MAT 161/163 | MAT 114 MAT 114 / 4 years regents Math MAT 124 |
| General Education course | | |
| General Education course | | |

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 are intending upon becoming an Earth Science teacher, consult with faculty in the [Science Education area](#).

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 | | |
| All College Elective course: Environmental Geochemistry or Hydrogeology or Fundamentals of GIS | GES 350 or GES 452 or GEG 425 | GES 201, upper-div. status GES 201 and another UD GES GEG 325 / instructor permission |

EIGHTH SEMESTER

| Course Title | Catalog Number | Prerequisite(s) |
|----------------------------------|----------------|----------------------------------|
| Geology Senior Seminar | GES 472 | Senior status / instructor perm. |
| Geology Internship | GES 488 | Department approval |
| Modern Solar System Astronomy | GES 331 | GES 131 |
| All College Elective course | | |
| 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 are intending upon becoming an Earth Science teacher, consult with faculty in the [Science Education area](#).