

# ACADEMIC ROADMAP

Earth Sciences, B.S.

Fall 2022

## Freshman Year (30 credits)

### FIRST SEMESTER

Course Title	Catalog Number	Prerequisite(s)
ES Major Gateway Course I	GES 20X	None
Lower-Division GES Elective	GES 1XX	None
Math I Option	MAT 1XX	Course Dependent
IF course		None
College Writing I	CWP 101	None

### SECOND SEMESTER

Course Title	Catalog Number	Prerequisite(s)
ES Major Gateway Course II	GES 20X	None
Recommend: Math II Option	MAT 1XX	Course Dependent
IF course		None
IF course		None
College Writing II	CWP 102	CWP 101

### Notes and recommendations:

- Earth Sciences majors take two out of the three 'gateway' courses: GES 200, GES 201, and GES 202 that are offered on a rotating schedule.
- Math I Option: MAT 124, MAT 126, or MAT 161/163. Student might need to take MAT 114 here instead, depending on H.S. math completed.
- Math II Option: MAT 126, MAT 127, MAT 162/164, MAT 311, or ECO 305 by advisement.
- Join the Astronomy and Geology Club; Attend at least one faculty office hour; visit Academic Commons (Math & Writing Centers, tutoring); view your degree audit sheet in Degree Works.

## Sophomore Year (60 credits)

### THIRD SEMESTER

Course Title	Catalog Number	Prerequisite(s)
Sedimentology and Stratigraphy	GES 306	GES Gateway courses
Fund. of Chemistry I and Lab	CHE 111 and 113	See catalog
Lower-Division GES Elective	GES 1XX	None
Introductory Astronomy	GES 131	None
If course		None

### FOURTH SEMESTER

Course Title	Catalog Number	Prerequisite(s)
Geomorphology	GES 307	GES Gateway courses
Recommend: Chem II and Lab	CHE 113 and 114	See catalog
Meteorology	GES 241	None
IF course		None
IF course		None

### Notes and recommendations:

- GES electives should be chosen by advisement.
- Form a study group; consider enrolling in a minor or certificate program (by advisement).

**Junior Year (90 credits)**

## FIFTH SEMESTER

Course Title	Catalog Number	Prerequisite(s)
Mineralogy	GES 303	GES Gateway courses
Maps and Mapmaking Using GIS	GEG 325	None
Physics I	PHY 1XX	Course Dependent
IF course		None

## SIXTH SEMESTER

Course Title	Catalog Number	Prerequisite(s)
Structural Geology	GES 408	GES 303
Structural Geology Field Exp.	GES 418	GES 303
Elective (Recommend Physics II)		
IF course		None

**Notes and recommendations:**

- Physics I: Student will take PHY 107 or PHY 111 by advisement.
- Physics II: Student will take second PHY course, PHY 108 or PHY 112, depending on first course.
- Upper-Division GES Elective may be GES 323 (3<sup>rd</sup> Year Research and Field Methods Experience), GES 452 (Hydrogeology), or an upper-division Astronomy Elective course.
- Visit the Career Development Center; talk to your faculty advisor about graduate school and undergraduate research options.

**Senior Year (120 credits)**

## SEVENTH SEMESTER

Course Title	Catalog Number	Prerequisite(s)
Geological Hazards	GES 428	GES 306, 307, 408
Upper-Division GES Elective	GES 3XX or GES 4XX	
Upper-Division Elective		
Elective		

## EIGHTH SEMESTER

Course Title	Catalog Number	Prerequisite(s)
Geology Senior Seminar	GES 472	ES Senior standing
Upper-Division Elective		
Elective		
Elective		

**Notes and recommendations:**

- GES 472 may be replaced by GES 431 (Planetarium Seminar).
- For Electives, students planning on becoming science teachers should take EXE 100, SPF 303, and GES 431.
- Students planning to become science teachers should also consider taking 9 credits of graduate courses during their senior year (SED courses – See the Science Education program coordinator).
- Apply for graduation; apply to graduate school, if applicable; visit the Career Development Center to have your resume reviewed