

ACADEMIC ROADMAP

Earth Sciences, B.S.

Fall 2023

Freshman Year (30 credits)

FIRST SEMESTER

Course Title	Catalog Number	Prerequisite(s)
GES Major Gateway Course I	GES 20X	None
Lower-Division GES Elective	GES 1XX	None
Math I Option	MAT 1XX	Course Dependent
GE23 course		None
College Writing I	CWP 101	None

SECOND SEMESTER

Course Title	Catalog Number	Prerequisite(s)
GES Major Gateway Course II	GES 20X	None
Recommend: Math II Option	MAT 1XX	Course Dependent
GE23 course		None
GE23 course		None
College Writing II	CWP 102	CWP 101

Notes and recommendations:

- Earth Sciences majors take two 'gateway' courses: GES 201 and GES 202 that are offered one per semester.
- 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
GE23 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
GE23 course		None
GE23 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
GE23 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)		
GE23 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 (3rd 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