

ACADEMIC ROADMAP

Geology, B.S.

Fall 2022

Freshman Year (30 credits)

FIRST SEMESTER

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

Notes and recommendations:

- Geology 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
Physics I	PHY 1XX	Course Dependent
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
Physics II	PHY 1XX	None
IF course		None
IF course		None

Notes and recommendations:

- Physics I is either PHY 107 or PHY 111 by advisement. Physics II is either PHY 108 or PHY 112 dependent upon the Physics I choice.

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
3 rd Year Res. & Field Meths.	GES 323	GES Gateway courses
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
Igneous & Metamorphic Petrol.	GES 401	GES 303
IF course		None

Notes and recommendations:

- 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
Fundamentals of GIS	GEG 425	GEG 325
Hydrogeology	GES 452	One GES 3XX course
Geology Research Seminar	GES 471	Instructor Permission
Fourth Year GES Elective	GES 4XX	Course Dependent

EIGHTH SEMESTER

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

Notes and recommendations:

- Electives: Select courses from: GES 433 (Geology Independent Research) – can take up to 4 times, GES 488 (Internship), an approved Geology Field Camp, or similar experience by advisement.
- It is recommended that students complete a summer Geology Field Camp experience if possible. See your advisor.
- Apply for graduation; apply to graduate school, if applicable; visit the Career Development Center to have your resume reviewed