

# GEOSCIENCES | BACHELOR OF SCIENCE IN GEOSCIENCES (GEOLOGY)

## Degree Maps

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ENG 101	English Composition I (SGE010 - English Discipline Area)	3
COMM 100	Fundamentals of Oral Communication (SGE020 - Communication Discipline Area)	3
GSCI 100 & GSCI 102	Exploring Earth and Exploring Earth Laboratory	4
UNIV 101	Freshman Seminar	1
MATH 110 or MATH 130	College Algebra (SGE030 - Math Statistics Discipline Area) or Pre-Calculus Mathematics	3
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
ENG 102	English Composition II (SGE010 - English Discipline Area)	3
GSCI 202 & 202L	Evolution of the Earth and Evolution of the Earth Laboratory	4
CHEM 120 & 120L	University Chemistry I and University Chemistry Laboratory I (SGE040 - Natural Physical Science Discipline Area)	5
SGE070 - Institutionally Designated Area: Critical Thinking		3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
GSCI 101 & GSCI 103	Earth and Environmental Systems and Earth and Environmental Systems Laboratory	4
GSCI 310 & 310L	Gem and Mineral Resources and Gem and Mineral Resources Laboratory	4
SGE070 - Institutionally Designated Area: Personal and Professional Development		3
SGE050 - Social Behavioral Sciences Discipline Area		3
SGE060 - Arts Humanities Discipline Area		3
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
GSCI 320 & 320L	Rock Origins and Rock Origins Laboratory	4
CHEM 122 & 122L	University Chemistry II and University Chemistry Laboratory II	5
SGE050 - Social Behavioral Sciences Discipline Area		3
SGE060 - Arts Humanities Discipline Area		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
GSCI 450 & 450L	Dynamic Earth and Dynamic Earth Laboratory	4
GSCI 452	Field Techniques	3
PHYS 111 & 111L	Physics I or Engineering Physics I <i>and</i> Engineering Physics I Laboratory	5
or PHYS 211 <i>and</i> PHYS 211L		
MATH 331 or MATH 234	Calculus Methods or Analytic Geometry and Calculus I	3
<b>Hours</b>		<b>15</b>

<b>Spring</b>		
GSCI 630 or MATH 250	Geostatistics and Spatial Data Analysis or Elements of Statistics	3
GSCI 240	Introduction to Geographic Information Systems (GIS)	3
GSCI 454	Applied Geology	3
GSCI 682 & 682L	Sedimentary Petrology and Sedimentary Petrology Laboratory	3
Directed Electives		2
<b>Hours</b>		<b>14</b>
<b>Fourth Year</b>		
<b>Fall</b>		
GSCI 685	Writing in the Sciences	3
GSCI 360	Intermediate Geographic Information Systems	3
Open Electives		3
Open Electives		3
Open Electives		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Open Electives		3
Open Electives		3
Open Electives		3
Open Electives		3
Open Electives		3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>120</b>

**Academic Degree Maps** are term-by-term sample course plans that specify milestones, courses, and special requirements that are necessary for facilitating on-time completion. Degree Maps are *examples* and are not prescriptive. Individualized choices such as concentration options, transfer credits, optional minors, advisory programs (certificates), etc. can alter the recommended coursework. Course offerings are subject to change. Students should consult with their academic advisors for additional guidance on course planning.

To determine courses to take in the directed choices (often listed as Program Elective Course) and directed elective course blocks see the overview tab for courses. To locate approved courses in General Education areas (Undergraduate Programs) see the general education section (<https://catalog.fhsu.edu/general-education/>) of the catalog.

The undergraduate course maps typically advise the most efficient route for students to complete the general education requirements. Courses that are required in the major may be listed as fulfilling relevant general education requirements. This will result in more open elective course hours in some maps than is listed on the degree overview page.