B.S. in Geology

Program Description

The Bachelor of Science in Geology degree prepares students to use common geological tools and lab and field techniques; analyze data; and develop as scientists. Students in this program have opportunities to study in the field as they explore geological concepts relevant to environmental protection, energy resource exploration and development, and land infrastructure engineering.

Delivery Mode

Traditional (on campus)

Curriculum

Course	Credits
General Education Courses	**40 or 41**
Building a Sense of Community **UNI 100** First-Year Seminar	1
Composition **ENG 101** English Composition I	3
Public Speaking Any Public Speaking Course	3
Mathematics and Quantitative Literacy **MAT 281** Calculus I	3
Health and Wellness Any Health and Wellness Course	3
Technological Literacy **GIS 311** Introduction to GIS	3
Humanities Any Humanities Course	3
Fine Arts Any Fine Arts Course	3
Natural Sciences **GLG 150** Introduction to Geology	4
Social Sciences Any Social Science Course	3
General Education Options • Any Ethics and Multicultural Awareness Emphasis Course • **ENG 217** Science and Tech Writing OR **ENG 102** Composition II • General Education Courses (two courses)	12

Course	Credits
Required Major Courses	**33**
GLG 200 Historical Geology	4
GLG 230 Earth Resources	3
GLG 301 Professional Development for Geologists	1
GLG 303 Hydrology	3
GLG 331 Mineralogy	4
GLG 332 Petrology	4
GLG 343 Geomorphology	3
GLG 423 Sedimentology/Stratigraphy	4
GLG 425 Structural Geology	4
GLG 437 Field Methods in Geology	3
Required Related Courses	**22**
MAT 282 Calculus II	3
MAT 215 Statistics OR **MAT 381** Calculus III	3
PHY 121 General Physics I OR **PHY 101** College Physics I	4
PHY 122 General Physics II OR **PHY 202** College Physics II	4
CHE 101 General Chemistry I	4
CHE 102 General Chemistry II	4
Recommended Free Electives	**24-25**
The following are recommended free electives to select from: • **GLG 210** Intro to Soils • **GLG 250** Volcanology • **GLG 290** Planetary Geology • **GLG 333** Geochemistry • **GLG 355** Geophysics • **GLG 402** Groundwater Hydrology • **GLG 427** Tectonics • **GLG 429** Petroleum Geology • **GLG 438** Computer Apps. in EAS • **GLG 441** Advanced Env Geology	24 or 25

Course	Credits
• **GLG 448** Watershed Evaluation • **GIS 350** Remote Sensing of Env • **GIS 413** Env Applications in GIS • **GEO 479** Internship (variable) • Other Adviser-Approved Courses	
Total	**120**

Additional requirements, not counted toward the General Education requirements, include:

- **Special Experience Course (1 course required):** GLG 391, 392, 393, 492 or GEO 479
- **Writing-Intensive Component Courses (2 courses required):** GLG 427, 438, 441, 448
- **Laboratory Course (1 course required):** GLG 150 Introduction to Geology

Program Note: 42 credits of advanced coursework at 300 or 400 level are required.

Program Webpage

https://www.calu.edu/academics/undergraduate/bachelors/geology/index.aspx