GEOLOGICAL SCIENCES, BS

Degree: Bachelor of Science (BS)
Major: Geological Sciences

Program Overview
Students in earth, environmental, and planetary sciences obtain a solid background in basic science and mathematics as well as intensive training in the major. In addition, because of the wide variety of ways in which geologic knowledge can be applied, all students are encouraged to take electives in subjects appropriate to their personal objectives, which may range from the engineering applications of geology to the socioeconomic and legal systems bearing on environmental issues. The undergraduate programs stress practical experience and fieldwork as well as classroom study.

All students participate in a three-semester Senior Project sequence in which they propose a research project, conduct the research, write a thesis, and present it to the department.

Learning Outcomes
- Students will be able to demonstrate an understanding of the key concepts and approaches in geology sufficient to apply this understanding to the interpretation of a wide range of earth processes (and their linkages) on different temporal and spatial scales.
- Students will be able to critically evaluate scientific arguments in geology.
- Students will be able to demonstrate competence in standard methods for collecting and evaluating geologic data.
- Students will be able to apply quantitative and qualitative tools in the analysis and interpretation of geologic data.
- Students will be able to execute a geologic research project, including the use of primary literature, collection and interpretation of evidence, and reporting of results.
- Students will be able to demonstrate breadth of technical understanding applicable to the geological sciences.

Undergraduate Policies
For undergraduate policies and procedures, please review the Undergraduate Academics section of the General Bulletin.

Accelerated Master's Programs
Undergraduate students may participate in accelerated programs toward graduate or professional degrees. For more information and details of the policies and procedures related to accelerated studies, please visit the Undergraduate Academics section of the General Bulletin.

Program Requirements
Students seeking to complete this major and degree program must meet the general requirements for bachelor's degrees and the Unified General Education Requirements. Students completing this program as a secondary major while completing another undergraduate degree program do not need to satisfy the school-specific requirements associated with this major.

Code | Title | Hours
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EEPS 110 | Physical Geology | 3
EEPS 101 | The Earth and Planets | 3
EEPS 115 | Introduction to Oceanography | 1
EEPS 119 | Geology Laboratory | 1
EEPS 210 | Earth History: Time, Tectonics, Climate, and Life | 3
EEPS 301 | Stratigraphy and Sedimentation | 3
EEPS 315 | Structural Geology and Geodynamics | 3
EEPS 317 | Introduction to Field Methods | 3
EEPS 341 | Mineralogy | 4
EEPS 344 | Igneous and Metamorphic Petrology | 4
EEPS 360 | Summer Field Camp | 6
EEPS 390 | Introduction to Geological Research | 3
EEPS 391 | Senior Project | 2
EEPS 392 | Professional Presentation | 2
Electives | | 21

At least two of these electives must be at the 200-level or higher.