

GEOLOGICAL SCIENCES

Explore your world and beyond



What can I do with a degree in Geological Sciences?

People with degrees in Geological Sciences find careers in these areas:

- **Astronomy and Cosmology**
- **Astrophysics**
- **Geographic Information Analysis**
- **Geotechnical Engineering**
- **Environmental Assessment**
- **Environmental Law and Policy**
- **Geochemistry**
- **Geophysics**
- **Hazardous Waste Disposal**
- **Hydrology and Hydrogeology**
- **Land Use Planning**
- **Oceanography**
- **Palaeoclimatology**
- **Paleontology**
- **Petroleum Geology**
- **Planetary Science**
- **Remote Sensing**
- **Resource & Hazard Assessment**
- **Resource Exploration & Development**
- **Seismology**
- **Soils Engineer**
- **Water Resource Development & planning**

A degree in Geological Sciences also prepares students for graduate work in this discipline; graduate degrees are typically required for professional participation in the field.

Astronomy - Geology - Planetary

The Geological Sciences program at CCSU provides a wide range of opportunities for students to explore the Earth and Earth processes, as well as the planets within our solar system and the stars beyond.

Geological Sciences Faculty

Marsha Bednarski, Ph.D., Science Ed & Assessment, Univ. of Connecticut, 1997.
Science Education, Elementary

Mark A. Evans, Ph.D., Geology, Univ. of Pittsburgh, 1989.
Structural Geology, Mineralogy, Petrology

Kristine M. Larsen, Ph.D., Physics, Univ. of Connecticut, 1990.
Stellar Astronomy, Astrophysics

Oluyinka Oyewumi, Ph.D., Virginia Tech, 2012
Hydrogeology, Geochemistry, GIS, Soils

Jennifer L. Piatek, Ph.D., Geology, Univ. of Pittsburgh, 2003.
Planetary Astronomy, Comparative Planetology

Michael C. Wizevich, Ph.D., Virginia Tech, 1991.
Stratigraphy, Sedimentology, Geomorphology

Jeff D. Thomas, D. Ed., Columbia Univ., 2008.
Science Education, Secondary

Earth Sciences Facilities

Extensive fossil, mineral & rock teaching collections

Microanalysis Laboratory

Hydrogeology and Geochemistry Laboratory

Observatory with 16 inch telescope

Planetarium

Sample Preparation and Thin Section Laboratory

X-Ray powder Diffractometer

Ground Penetrating Radar

Sediment Particle Size Analyzer

High Pressure Liquid/Ion Chromatograph

Fluid inclusion Heating-Freezing Stage

15 Leica Petrographic Microscopes

We encourage our students to get involved early

Hands-on Learning

Field work is a very important component of our instructional program and is integrated into most courses. Earth Sciences students have many opportunities to participate in field trips that will facilitate the study of earth processes, earth resources, earth history and environments that people have modified.

All students have the opportunity to work on active research projects. We highly encourage our students to get involved as soon as they feel comfortable in their academic program. It is not unusual to have students participate in research in their sophomore, or even freshmen year.

In particular, we require our students to do a "senior project" as a capstone experience to their degree. This project enables a student to work on under the supervision of a faculty member, write a research report and present the results at a professional conference. This is excellent preparation for graduate school and/or the workplace.

Examples of Recent Student Projects:

Shannon Guerrero (14) – Paleoclimate study of a lake in northern Connecticut using pollen.

Amanda Delisle, (14) - History of fracture opening, temperature, and fluid pressure in the Marcellus shale, west-central Pennsylvania valley and ridge.

Ryker Nolan (14) - Thermophysical and morphological analysis of ice-related modification in the northeastern Argyre basin, Mars.

Heidi Olszewski (14) - Analysis of toxic metals in stream sediments along Piper Brook, Park River watershed, CT.

Justin Ahern (16) – Triassic sedimentary rocks of southeastern Switzerland

Nathan Pirovane (15) – Paleofluid flow along faults in the Hartford Basin, CT.



CCSU students taking a sediment core for paleoclimate study from Lake Louise in Penwood State Park, Bloomfield, CT. Also present are Dr. Mark Evans (CCSU) and Dr. Christoph Geiss (Trinity College)

We offer two BS Geological Sciences degree programs



For additional information, contact:
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Fax: (860) 832-2946
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The **Earth Science BS** is a flexible major designed for students planning careers such as astronomy, planetary science, environmental and environmental geoscience.

Students interested in focusing in astronomy should contact: **Dr. Kris Larsen** (larsenk@ccsu.edu)

Students interested in focusing in planetary science should contact: **Dr. Jen Piatek** (piatekjel@ccsu.edu).

Students interested in focusing in environmental geoscience should contact: **Dr. Oluyinka Oyewumi** (oyewumi@ccsu.edu)

The **Geology BS** will prepare students for careers with government agencies (e.g. geological surveys and environmental protection agencies) and geotechnical, environmental, mining, and energy industries. In addition, students will be prepared for graduate-level studies in geology.

Students interested in focusing in geology should contact: **Dr. Mark Evans** (evansmaa@ccsu.edu)

In addition, we also offer an **Earth Science BSED** and minors in **Astronomy, Astrobiology, Earth Science, and Geology**