

# GEOLOGY - MASTER OF SCIENCE (MS)

Geological Sciences is a research-oriented department affiliated with a number of research institutes and research centers, including the Cooperative Institute for Research in Environmental Sciences (CIRES), the Institute of Arctic and Alpine Research (INSTAAR), the Laboratory for Atmospheric and Space Physics (LASP), the Museum of Natural History, the Center for Astrobiology and the Energy and Minerals Applied Research Center (EMARC). Related areas of study include geography, astrophysical and planetary sciences, atmospheric and oceanic sciences, chemistry, physics, geophysics, microbiology, ecology and evolutionary biology. The GEOL program also participates in certificate programs in geophysics (<https://www.colorado.edu/geophysics/geophysics-graduate-certificate/>), oceanography (<https://www.colorado.edu/atoc/certificate/>) and hydrological sciences (<https://www.colorado.edu/program/hydrosciences/>). Degree programs for incoming graduate students are individually designed according to research efforts of the faculty. It is highly recommended that students locate a faculty member whose research interests most closely match their own.

For additional details, visit the Geological Sciences website (<https://www.colorado.edu/geologicalsciences/academic/graduate-degree-programs/>).

## Requirements

### Admission Requirements

Students applying for admission are evaluated holistically, including their undergraduate preparation, personal statement, research interests and letters of recommendation. The Graduate Record Examination (GRE) is not required. Each student acquires a primary advisor and an advisory committee that provides guidance throughout the degree program.

### Prerequisites

#### Program Requirements

Candidates for the master's degree in geological sciences must complete at least 30 hours of graduate credits either with a thesis (Plan I) or without a thesis (Plan II). The only specifically required classroom courses are GEOL 5101 Introduction to Geological Sciences Faculty I and GEOL 5102 Introduction to Geological Sciences Faculty II (1 credit each).

A maximum of 6 credit hours may be completed at the 3000- or 4000-level to count toward the 30 hours. A maximum of 9 graduate-level credits may be transferred from another university. Both types of substitution are at the discretion of the student's principal advisor and the department's Associate Chair for graduate studies

Students interested in graduate work in the geological sciences should carefully read the detailed information regarding admission, registration and degree requirements on the department's Information for Prospective Graduate Students (<https://www.colorado.edu/geologicalsciences/academic/prospective-graduate-students/>) webpage.

#### Plan I: Thesis Option

Students must complete a minimum of 4, but no more than 6, credit hours of Master's Thesis (GEOL 6950) as part of the 30 credit hour requirement.

#### Plan II: Non-thesis Option

The Department of Geological Sciences typically does not admit students into a Plan II (non-thesis) master's program, but Plan I or PhD candidates occasionally transfer into this option. Students must complete 3 credit hours of Plan II Master's Research (GEOL 6960) under the supervision of the student's advisory committee, as part of the 30 credit hour requirement.

## Learning Outcomes

By the completion of the program, students will be able to: