MASTER OF SCIENCE IN GEOSCIENCES, PLAN A

The Master of Science in Geosciences, Plan A program provides best-practices preparation for employment in major fields in the geoscience professions, and is a typical working degree for many energy, environmental, natural resource, regulatory, and other professional careers. Each graduate student follows a custom-tailored program of coursework and research developed with their advisor and graduate committee and documented in their thesis. Strengths of the program include diverse scientific specializations, an interdisciplinary approach to addressing Earth resource education, professional networking and other preparation, global to local research topics reflecting the wide range of specializations in the department, field research, and close student/faculty mentorship.

Faculty advise M.S. students in the wide range of subdisciplines represented within the department, including geophysics, economic geology, environmental geology, geochemistry, geochronology, geodynamics, geomorphology, hydrogeology, igneous and metamorphic petrology, sedimentology, seismology, paleoclimatology, remote sensing, glaciology, stratigraphy, structural geology, and tectonics. Students work with their advisor and graduate committee to identify a curriculum specific to their academic interests and goals. Prospective students should contact candidate department faculty advisors to discuss interests and develop a program plan.

Students interested in graduate work should refer to CSU's Graduate and Professional Bulletin. (http://catalog.colostate.edu/general-catalog/graduate-bulletin/)

Learning Objectives

1. Develop expertise in one or more fields of the Geosciences, to a level at which the student can successfully prosper in the profession.
2. Obtain practice in the steps of a research project, including proposal writing, research design, data collection and data evaluation, communication, and interpretation.
3. Become practiced at the critical thinking skills needed to conceive, develop, test, and refine scientific ideas and hypotheses.
4. Master preparation and writing of a comprehensive research report in the form of a thesis, with an oral defense including placing one's own research and results into the context of current disciplinary knowledge and understanding.