

Geological and Atmospheric Sciences

www.ge-at.iastate.edu/

The Department of Geological and Atmospheric Sciences seeks to establish innovative teaching and outstanding research programs that apply fundamental principles of physics, chemistry, biology, and mathematics to cross-disciplinary problems related to the earth sciences. As a basis for this mission, the Department maintains strength in fundamental topics of geology, meteorology, and hydrology that involve investigating the dynamic nature of the structure, composition, and interactive processes of the Earth and its component systems.

Study of these systems includes the application of scientific principles to a wide range of environmental, agricultural, and natural-resource problems, so that through its teaching and research activities, the department fosters a global perspective on the geosciences. Individual elements of study, such as atmospheric-circulation patterns, water cycling, geochemical interactions, glacier dynamics, or rock formation, are viewed not only in terms of their own intrinsic value, but also in terms of their role in the evolving earth system. The Department recognizes that many fundamental advances in the geosciences are occurring at the interfaces with other disciplines and between subdisciplines in the field, so department faculty strive to form mutually beneficial research and educational collaborations with other programs at Iowa State University and other institutions around the world by taking a leadership position in solving problems at these interfaces.