

MASTER OF SCIENCE IN WATERSHED SCIENCE, PLAN A

Sustainable management of freshwater resources is an increasingly important and complex challenge in Colorado and worldwide, and we need scientists who can address complex water issues. The watershed science program focuses on how water moves through the landscape, what factors affect its quality, and how to manage water resources. Students in the Master of Science in Watershed Science, Plan A program work closely with research scientists in the classroom, laboratory, and field on both basic and applied watershed science research. Students are exposed to cutting-edge field, data analysis, and modeling techniques through flexible programs of study and access to a breadth of water-related courses throughout the university. Students also have opportunities to participate in seminars and field courses.

The program emphasizes the advisor/student relationship. There is no core curriculum; rather, the advisor and student develop a program of study that best meets the requirements of the research to be undertaken and the needs of the student, culminating in the completion of a master's thesis.

The program has a strong record of employment and acceptance to leading doctoral programs after graduation, with graduates holding positions in federal, state, and local natural resource agencies, consulting firms, non-governmental organizations, industry, teaching, and research. Most students complete coursework that enables them to meet the U.S. governmental hydrologist certification.

[Students interested in graduate work should refer to the Graduate and Professional Bulletin.](#)

Learning Objectives

1. **Systems understanding:** Identify and distinguish systems components and their interactions to explain, illustrate and analyze system understanding.
2. **Watershed science content and principals:** Apply complex watershed science principals to complex problems to develop sustainable solutions.
3. **Problem solving:** Work in teams and communicate effectively using a diverse set of analytical and applied tools.
4. **Interdisciplinary understanding:** Work in an interdisciplinary environment and demonstrate respect for alternative points of view.