

## **Advanced Certificate in Hydrogeology**

The goals of the advanced certificate in hydrogeology program in the Department of Geosciences are to provide students with a comprehensive education in the theoretical and applied aspects of hydrogeology, to provide usable skills for professional employment with state and federal agencies and private industry, to serve as a resource for the protection and management of groundwater resources of the state and region, and to serve as a resource for the extension and expansion of current knowledge in hydrogeology. The program in hydrogeology addresses the areas of groundwater quality, groundwater availability, and management strategies.

Students have access to computers, logging equipment, drilling equipment, geophysical and water quality instrumentation, and vehicles.

### **Additional Admission Requirements**

In addition to the general requirements of the College of Arts and Sciences, the Department of Geology has the following requirements for the certificate program in hydrogeology:

1. Three letters of recommendation from individuals who can evaluate the applicant's potential to do graduate work in geology. Professionals working in the field of groundwater hydrology must submit at least one letter of recommendation from their employers, documenting the applicant's professional experience and performance.
2. A statement of interests and career goals.
3. A baccalaureate degree in geology. Non-geologists with degrees in engineering or physical sciences also will be considered, but they must complete coursework in physical and historical geology. In order to satisfy this requirement, these applicants may take Geol 1121 and Geol 1122 prior to applying. Ordinarily, grades of A will be expected in order to demonstrate mastery of these subjects.
4. All students must have completed courses equivalent to the following: Calculus: Math 2211 (4) and Math 2212 (4); Physics: Phys 1111K (4) or Phys 2211K (4); and Chemistry: Chem 1211K (4) and Chem 1212K (4).

### **Certificate Requirements**

1. Students must complete with a grade of C or higher six semester courses in hydrogeology.
2. Students must complete the program with a minimum 3.0 grade-point average in order to receive a certificate.