

### Emphasis - Hydrology

- M.S. in Engineering Science
- Emphasis Hydrology

# M.S. in Engineering Science Description

The M.S. in engineering science is offered in a number of emphasis areas: aeroacoustics, chemical engineering, civil engineering, computational hydroscience, computer science, electrical engineering, electromagnetics, environmental engineering, geology, geological engineering, hydrology, mechanical engineering, material science and engineering, and telecommunications.

### Minimum Total Credit Hours: 30 Course Requirements

A student must complete the requirements for an emphasis area. For most emphasis areas, the degree may be completed as either a thesis option (30-hour program, to include 6 hours of thesis) or nonthesis option (30-hour program, to include a minimum of 3 hours of a design-oriented project course).

## **Emphasis - Hydrology Description**

A M.S. in engineering science with emphasis in hydrology prepares a student with advanced technical knowledge and communication skills for pursuing a career in industry, research and development, public service, or for doctoral work.

#### **Course Requirements**

For the M.S. with emphasis in hydrology, a student must complete 24 semester hours of course work plus 6 hours of thesis. The 24 hours of course work includes 13 hours of required courses [Hydrogeology (Geol 505), Environmental Geochemistry (G E 503), Groundwater Mechanics (Engr 636), and Contaminant Transport (Engr 645)], 6 hours from an approved list of electives (G E 518, C E 541, C E 542, C E 543, Ch E 545, Geol 615, Engr 537, Engr 616, Engr 637, Engr 648), and an additional 5 hours as approved by the student's committee. Up to 3 hours of Engr 695 (seminar) may be used as part of the required hours provided that the seminar schedule includes critiqued presentations by the enrolled students.

#### Other Academic Requirements

The student must prepare and orally defend a thesis.

