**Emphasis - Hydrology**

- Ph.D. in Engineering Science
- Emphasis - Hydrology

**Ph.D. in Engineering Science**

**Description**
The Ph.D. 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, and material science and engineering.

**Minimum Total Credit Hours: 66**

**Course Requirements**
A student must complete the requirements for one of the emphasis areas. All doctoral programs require completion of a comprehensive examination, dissertation prospectus, and a dissertation. See the department chair or adviser for specific requirements for an emphasis area.

**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 696 (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.