

### **Emphasis - Computer Science**

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

# 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 engineering, computer science, electrical engineering, electromagnetics, environmental engineering, geology, geological engineering, hydrology, mechanical engineering, and material science and engineering.

### Minimum Total Credit Hours: 54 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 - Computer Science Description**

A Ph.D. in engineering science with emphasis in computer science prepares a student with advanced technical knowledge and communication skills for pursuing a career in industry, research and development, or public/government service. Students entering the program come from a variety of engineering and nonengineering disciplines such as electrical engineering, physics, biology, and the liberal arts.

#### **Course Requirements**

For the Ph.D. in engineering science with an emphasis in computer science, the student must present a bachelor's or master's degree in the field or the equivalent and take additional classes adding up to 48 hours of approved graduate-level course work (excluding the 18+ semester hours of dissertation research). This may include no course numbered lower than Csci 510, and a minimum of 18 hours must be in computer science courses at the 600 level. The student may count up to 9 credit hours of independent study taught by Department of Computer and Information Science faculty members toward the degree.

### Other Academic Requirements

The student must pass the comprehensive examination and the preliminary oral examination (dissertation prospectus).

