

## [Emphasis - Computational Hydroscience](#)

- [Ph.D. in Engineering Science](#)
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### **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 - Computational Hydroscience** **Description**

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

### **Course Requirements**

The Ph.D. in engineering science with an emphasis in computational hydroscience and engineering involves 48 credit hours of course work, including core courses and electives, 12 hours of research topics, and 18 dissertation hours. Students may specialize in either hydroscience/engineering system modeling or computational methodologies applicable to hydro-systems modeling.

### **Other Academic Requirements**

Other requirements include publishing at least two refereed papers (preferably one of them to be published in a professional journal); participating in research seminars; completing assigned research projects; and passing written and oral comprehensive exams.

