

Emphasis - Computational Hydroscience

- [M.S. in Engineering Science](#)
- [Emphasis - Computational Hydroscience](#)

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 engineering, 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 a:

- Thesis option (30-hour program, to include 6 hours of thesis),
- Nonthesis option (30- hour program, to include a minimum of 3 hours of a design-oriented project course), or
- Coursework option (30-hour program, to include a final oral examination in front of a committee, but no written report)

Emphasis - Computational Hydroscience **Description**

A M.S. in engineering science with an 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, public service, or for doctoral work.

Course Requirements

The M.S. with emphasis in computational hydroscience and engineering can be completed as either a thesis or nonthesis option.

The thesis option entails 24 credit hours of course work (plus at least 6 thesis hours), including 12 hours of core courses in numerical methods, fluid dynamics, transport phenomena, and hydrosciences, and 12 hours of approved electives.

The nonthesis option includes an additional 3 hours of approved electives, as well as completion of a research project and report. Both options require the publication of a technical paper in either a journal or a conference proceeding; attendance and presentation at research seminars; and passing the comprehensive oral exam.

Other Academic Requirements

For either option, a candidate must pass a final oral examination.

