Emphasis - Computational Hydroscience

- M.S. in Engineering Science
- Emphasis - Computational Hydroscience
- Degree Requirements

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 - 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.

Degree Requirements

The academic regulations for this degree program, as entered in the University of Mississippi Catalog, are in effect for the current or selected academic year and semester. The University of Mississippi reserves the right to 1) change or withdraw courses; 2) change rules for registration, instruction, and graduation; and 3) change other regulations affecting the student body at any time.

M.S. in Engineering Science

REQUIREMENT	HOURS	DESCRIPTION
Pass oral exam		Student must pass a final oral examination.
Select an emphasis		Student must enroll in one of the MS in Engineering Science emphasis areas: aeroacoustics, chemical engineering, civil engineering, computational hydroscience and engineering, computer science, electrical engineering, electromagnetics, environmental engineering, geological engineering, geology, hydrology, materials science and engineering, mechanical engineering, or telecommunication.
GPA requirements		A cumulative average of not less than 3.0 (B) must be achieved in all graduate work taken.
Engineering Dean's approval		This Degree Audit program is an advising tool only. The student must still apply for a degree by submitting their degree application to engineer@olemiss.edu. The dean's office will make the final certification that the courses listed on the application qualify the student for graduation. The Dean's Office will also determine if other university requirements (GPA, etc.) have been met.

Emphasis - Computational Hydroscience

REQUIREMENT	HOURS	DESCRIPTION
Thesis vs non-thesis		Student must complete either the thesis or the non-thesis option for the MS in Engineering Science with Emphasis in Computational Hydroscience and Engineering. The student must also submit a thesis or research project to his/her GPC/Chair.
Non-thesis option	30	For the non-thesis option, the student must complete at least 30 hours of graded course work including 12 hours of courses in numerical methods, fluid dynamics, transport phenomena, and hydrosciences, 15 hours of approved electives, and 3 hours research project and report. All course work must be approved by the student's GPC/Chair.
Thesis option	30	For the thesis option, the student must complete at least 24 hours of graded course work including 12 hours of courses in numerical methods, fluid dynamics, transport phenomena, and hydrosciences, and 12 hours of approved electives. The student must also complete at least 6 hours of thesis credit. All course work must be approved by the student's GPC/Chair.

Thursday, April 10, 2025 at
1:13:19 am CDT

REQUIREMENT	HOURS	DESCRIPTION
Thesis or project		For the thesis option, the student must submit a thesis to his/her GPC/Chair. For the non-thesis option, the student must submit a research project to his/her GPC/Chair.