Emphasis - Environmental Engineering

- M.S. in Engineering Science
- Emphasis - Environmental Engineering
- 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 - Environmental Engineering

Description

A M.S. in engineering science with emphasis in environmental 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. Students can concentrate in any of the following specialty areas: water resources, watershed systems, hydrology, surface water quality, stormwater, wastewater, solid waste, air pollution, groundwater modeling and remediation, and remote sensing and geospatial technologies. Students entering the program come from a variety of engineering and nonengineering disciplines, such as geology, chemistry, biology, and mathematics.

Goals/Mission Statement

The program will provide high quality graduate education in a range of environmental disciplines and will produce research and scholarship that is nationally recognized and supports the economic development of the state, the region, and the nation.

Course Requirements

The M.S. with emphasis in environmental engineering can be completed as either a thesis or nonthesis option. The thesis option requires at least 24 hours of course work and at least 6 hours of thesis credit (Engr 697- Thesis) with a thesis defense. The nonthesis option requires 27 hours of course work and a 3-hour project or research course (Engr 699-Special Projects in Engineering Science or Engr 693-Research Topics in Engineering Science) with a written report and oral presentation.

The graduate course work for either option must include at least one course in mathematics (e.g., Engr 591-Engineering Analysis I, Math 555- Advanced Calculus I, Math 556-Advanced Calculus II, Math 575- Mathematical Statistics I), one course in numerical method (e.g., Engr 590-Finite Element Analysis), and one course in mechanics (e.g., Engr 617-Continuum Mechanics). Other graduate course work must be approved by the student's adviser.

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 - Environmental Engineering

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 Environmental 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 27 hours of graded course work including a course in mathematics, a couse in numerical ethod, and a course in mechanics. The student must also complete at least one 3-hour project or research course. All course work must be approved by the student's GPC/Chair.

The University of Mississippi is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award certificates and baccalaureate, master's, specialist, and doctoral degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097, call 404-679-4500, or visit online at www.sacscoc.org for questions about the accreditation.

REQUIREMENT	HOURS	DESCRIPTION
Thesis option	30	For the thesis option, the student must complete at least 24 hours of graded course work including a course in mathematics, a couse in numerical method, and a course in mechanics. The student must also complete at least 6 hours of thesis credit. All course work must be approved by the student's GPC/Chair.
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.

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