Emphasis - Environmental Engineering

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

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 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 - Environmental Engineering

Description

A Ph.D. 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, or public service. Depending on their career focus, 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.

Course Requirements

The Ph.D. with emphasis in environmental engineering requires 24 hours of course work beyond a master’s degree or 48 hours beyond a bachelor’s degree, and 18 hours of dissertation credit. At least two courses must be in mathematics (e.g., Engr 591-Engineering Analysis I, Engr 592- Engineering Analysis II, Math 555-Advanced Calculus I, Math 556-Advanced Calculus II, Math 575-Mathematical Statistics I), one course must be in numerical method (e.g., Engr 590-Finite Element Analysis), and one course must be in mechanics (e.g., Engr 617-Continuum Mechanics). Other graduate course work must be approved by the student's advisory committee.

Other Academic Requirements

Completion of a qualifying examination, a comprehensive examination, a dissertation prospectus, and a dissertation defense is required. Before admission to candidacy, the student must pass written and oral comprehensive exams.

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.