Emphasis - EE (Electromagnetics)

- M.S. in Engineering Science
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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 - EE (Electromagnetics)

Description

An M.S. in engineering science with emphasis in electromagnetics 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 electromagnetics can be taken as a thesis or nonthesis option. Either option requires 10 semester hours of core courses in electromagnetics theory and applications: Numerical Methods in Electromagnetics (Engr 626); Advanced Electrodynamics (Engr 721); Passive Microwave Circuits (Engr 723); and Seminar (Engr 695).

Also required are 8 semester hours in specific areas of electromagnetics, including microwave circuits, antennas, electromagnetics, and computational electromagnetics courses (from among Engr 590, Engr 593, Engr 622, Engr 624, Engr 627, Engr 687, Engr 691, Engr 693 (no more than 2 semester hours), Engr 719, Engr 725, Engr 728, and Engr 699).

For the thesis option, the student must complete 6 hours of electives, including 3 to 6 hours in a minor field. The thesis candidate must take at least 6 hours of thesis.

For the nonthesis option, the student also must complete 9 hours of electives, including 3 to 6 hours as a minor from mathematics, physics, or another area with approval, and technical electives from the areas listed above. The nonthesis candidate also must complete a 3-hour project or research course with written report and oral presentations, and a final oral exam.

Other Academic Requirements

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

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.