Chapter 5

Requirements for the MS Degree

5.1 Overview

The College of Engineering (CENGR) offers research-based master’s degrees in biochemical engineering, environmental engineering, biological engineering and agricultural engineering. In addition, the CENGR offers the MS-Engineering. The MS Program provides an opportunity for learning skills in advanced data analyses, original research presentation and problem definition. For details, please go to: http://www.engr.uga.edu/degrees/phd.html.

5.2 Required Coursework

A student must complete at least 24 semester hours of graduate credit, excluding thesis. At least 12 semester hours must be UGA courses open only to graduate students. The 12 hours may not be satisfied by transfer credit, master’s research (7000), project research (7010), thesis writing (7300), or independent study courses. The CENGR places high value on advanced proficiency in mathematics, the student’s selected area of engineering and science, and knowledge of research methods. To achieve this proficiency, the following requirements must be met.

The CENGR requires the following courses (or their equivalent) approved by the Graduate Coordinator to provide skills for engineering research.

ENGR 6910 Research Methods (3 hrs)
ENGR 8950 Graduate Seminar (1 hr)
ENGR 8103 Computational Engineering (3 hrs)

Course(s) should be included to provide students with knowledge of instrumentation for engineering research, advanced mathematics, statistical methods and computers. Students with non-engineering BS degrees are highly encouraged to take ENGR 6920 Theory of Design.

The courses in the program of study are selected by the student in consultation with his/her Major Professor and the Advisory Committee and approved by the Graduate Coordinator. Generally, the courses selected should have the student acquire the following:

- Understanding in the selected area of study
- Ability to synthesize knowledge
- Rational problem solving skills
- Confidence in conducting independent work.

The typical load for an MS student on assistantship is 15-18 hours, with 9-12 hours of course work and the remainder split between 7010 and 7000 (research) or 7300 (thesis). The student not on assistantship must take a minimum of 3 hours. Students must be registered the semester they intend to graduate.