

# MATHEMATICS

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Department Website (<http://www.math.sc.edu/>)

The Department of Mathematics has evolved into one of the premier centers in the Southeast for mathematics research and education. Its masters and doctoral programs have been cited for excellence by the S.C. Commission on Higher Education. With its internationally renowned faculty and supportive atmosphere, the department provides a stimulating environment for graduate studies. As the face of mathematics changes, the department responds with appropriate curriculum additions and revisions.

The department's degree programs provide first the core fundamentals, and then the specialized expertise and interdisciplinary skills required of the modern mathematician. Training for those who wish to pursue a career in teaching, those who plan mathematics-related careers in business, government, or industry, and those who wish to obtain the intensive training that will lead them into the contemporary research community is available.

The Department of Mathematics offers programs leading to the Master of Arts, Master of Science, and Doctor of Philosophy, including a Ph.D. option of a Concentration in Applied and Computational Mathematics. This Concentration emphasizes core mathematics that leads to the frontiers of research both within applied and computational mathematics and cuts across disciplinary boundaries.

The department also offers programs leading to the Master of Mathematics and, in conjunction with the College of Education, a program leading to the degree of Master of Arts in Teaching. A description of the basic M.A.T. requirements appears in the College of Education section of the Graduate Studies Bulletin.

For more comprehensive general information, see the website <http://www.math.sc.edu/graduate/> (<http://www.math.sc.edu/graduate/>). Inquires concerning individual cases should be directed to:

Director of Graduate Studies  
Department of Mathematics  
University of South Carolina  
Columbia, SC 29208  
email: [graddir@math.sc.edu](mailto:graddir@math.sc.edu)

## Degree Requirements (General)

There are certain requirements imposed by the Graduate School on all programs. We reiterate only the most pertinent ones here; others appear elsewhere in this Bulletin, and are routinely fulfilled over the course of the program of study.

The M.S. and M.A. degrees require 30 approved credit hours of course work, at least half of which (excluding the thesis) must be taken at the 700 level or above. In addition, a Comprehensive Examination taken upon conclusion of the program is required. Both the M.S. and the M.A. degrees require a thesis (3 credits of MATH 799).

Each candidate for the Ph.D. degree is required to complete a minimum of 60 hours of course work beyond the baccalaureate degree, including 12 credit hours of graduate course work separate from the course work covered by the Admission to Candidacy and Comprehensive Examinations (see below) and 12 credit hours of dissertation work

(MATH 899). The Ph.D. program has three examinations: Admission to Candidacy, Comprehensive, and Doctoral Defense.

Note that "credit hours" are not earned if a course is taken on an "Audit" basis. Courses labeled 7xx-I may not be used to satisfy M.S., M.A., or Ph.D. requirements except in rare circumstances, and only by special permission. These courses are designed for the M.M. and M.A.T. programs.