

MATHEMATICS, M.S.

The M.S. is designed primarily for students who seek broad and intensive preparation for teaching in a junior college or working in industry.

Learning Outcomes

1. MM students will demonstrate an understanding of algebra, calculus, statistics and geometry as taught at the secondary level, and the basic elements of group theory, ring theory, and real analysis, that is, the material of core curriculum courses listed above. MS and MA students will master the material of the core curriculum courses listed above, as well as the foundational material of their specialty. The level of problem formulation and solution, and written expository skill, should reach a level adequate for the writing of a thesis.
2. All students who are GTA's will demonstrate teaching proficiency in the settings described in the Curriculum above.

Admissions

For admission into the M.S., M.A., M.M., or Ph.D. degree programs, applicants must have a bachelor's degree from an approved institution and should have an undergraduate foundation in mathematics equivalent to that of a major in mathematics at the University of South Carolina. ~~At a minimum, this should include a course in abstract algebra (equivalent to MATH 546) and one in advanced calculus (equivalent to MATH 554). A one-year sequence in each is desirable.~~ A minimum B (3.0) average in all college-level math courses is required for full admission.

Applicants should submit an official transcript from each school or college previously attended, and at least two letters of recommendation from persons familiar with their abilities in mathematics. Applicants whose native language is not English are also required to submit a satisfactory score on the iBT TOEFL exam. The minimum score for admission to the program is 80.

[Application and materials should be submitted online or be mailed to:](#)

[The Graduate School](#)
[University of South Carolina](#)
[Columbia, SC 29208](#)

Degree Requirements (30 Hours)

The M.S. degree requires a thesis and 30 approved semester hours of graduate course work, including satisfactory completion of the three-credit thesis course MATH 799, and at least one course from each of two Mathematics Ph.D qualifying exam sequences. The courses in the student's program should be numbered 700 and higher. The M.S. is designed primarily for students who seek broad and intensive preparation for teaching in a junior college or working in industry.

The thesis for this degree is generally a short monograph, which might consist of original research and/or an explication of one or more research papers in an area of interest to the student. The thesis is subject to the approval of the thesis committee, consisting of the major professor and a second reader. Upon conclusion of the program, each M.S. degree candidate must pass an oral examination administered by the thesis committee.