

MASTER OF SCIENCE IN MATHEMATICS

Program Description

In the MS in Mathematics program students take courses in the fundamental areas of advanced pure and applied mathematics. Small class sizes and close mentoring by faculty create a positive environment designed to help students succeed in their academic and life goals. Graduates of this program have a more comprehensive and deeper view of mathematics, leading to diverse career opportunities in teaching, industry, or doctoral studies in mathematics. Past graduates are employed at community colleges and universities, in actuarial science, computer science, accounting/finance, and the oil and gas industry. A thesis option is available for students interested in doing mathematical research in the areas of combinatorics, commutative algebra, algebraic statistics, functional analysis, algebraic geometry, topology, knot theory, differential geometry, applied mathematics, numerical analysis, mathematical biology, and differential equations.

Admissions

Applicants seeking admission to the graduate program in Mathematics must submit the following directly to the Office of Graduate Admissions:

1. Graduate Application (<http://www.shsu.edu/admissions/apply-texas.html>)
2. Application fee (<http://www.shsu.edu/dept/graduate-studies/application-fee.html>)
3. Official transcript(s) of all previous college work
4. Official GRE scores
5. Three letters of recommendation from the Mathematics or Statistics faculty at the student's undergraduate degree-granting institution

An overall undergraduate GPA of 3.0 or higher is preferred for admission into the Mathematics program. However, GPA and GRE scores do not constitute the primary criteria for admission. Based on a review of an applicant's undergraduate transcript, the Department of Mathematics and Statistics may require completion of undergraduate stem courses as a condition for admission.

Degree Requirements

The degree requires a minimum of thirty-six hours of graduate credit. A comprehensive examination over the algebra and analysis sequences is administered by the Mathematics Graduate Committee at the beginning of the second year of the program. Requirements specified in the degree plans are subject to minor modification by the department. To ensure a balanced program, all electives must be approved by the graduate advisor.

Master of Science (MS) in Mathematics (Thesis)

Master of Science in Mathematics (Thesis)

Courses		
MATH 6333	Foundations Of Analysis I	3
MATH 6334	Foundations Of Analysis II	3
MATH 6335	Algebra I	3
MATH 6336	Algebra II	3
MATH 5397	Discrete Mathematics	3
MATH 6332	Introduction To Topology	3
MATH 6368	Numerical Linear Algebra	3
MATH 6379	Functions Of Complex Variable	3
Electives		
Select two graduate courses in MATH selected in consultation with the Graduate Advisor		6
Additional Coursework		
MATH 6099	Research and Thesis	3
MATH 6398	Research And Thesis	3
Total Hours		36

Master of Science (M.S.) in Mathematics (Non-Thesis)

Master of Science in Mathematics (Non-Thesis)

Courses		
MATH 6333	Foundations Of Analysis I	3
MATH 6334	Foundations Of Analysis II	3
MATH 6335	Algebra I	3
MATH 6336	Algebra II	3

MATH 5397	Discrete Mathematics	3
MATH 6332	Introduction To Topology	3
MATH 6368	Numerical Linear Algebra	3
MATH 6379	Functions Of Complex Variable	3
MATH 6398	Research And Thesis	3
Electives		
Select three graduate courses in MATH selected in consultation with the Graduate Advisor		9
Total Hours		36

Senior Courses Open to Graduate Students

With departmental approval, a maximum of six hours of some senior (4000-level) courses may be taken for graduate credit toward the MS in Mathematics.