

Learning Goals for Master of Science in Mathematics

Students will

1. Students will develop an in-depth integrated knowledge in Algebra and Analysis as well as multiple elective areas of mathematics, beyond the undergraduate level. They will analyze foundational theorems in much greater depth and, exceeding what is expected of an undergraduate mathematics major, give complete proofs of these advanced theorems.
2. Students will be able to communicate mathematical ideas and present mathematical arguments both in writing and orally using proper use of mathematical notation and terminology at an advanced level that represents formal mathematical practice.
3. Students will be able to give complete solutions to challenging graduate-level mathematical problems.
4. Students will be able to synthesize material from multiple perspectives and make connections with other areas of mathematics.

Alignment with Institutional Learning Goals

Graduates will	1	2	3	4
Demonstrate an integrative knowledge of the human and natural worlds;	X			X
Develop habits of critical analysis and aesthetic appreciation;		X	X	
Apply creative and innovative thinking;			X	
Communicate skillfully in multiple forms of expression;		X		
Act competently in a global and diverse world;				
Understand and promote social justice;				
Apply a framework for examining ethical dilemmas;				
Employ leadership and collaborative skills;				
Understand the religious dimensions of human experience.				

Alignment with Assessment Measures

Measure	1	2	3	4
Final Oral Comprehensive Exam	Direct	Direct	Direct	Direct
Master's Essay	Direct	Direct	Direct	Direct
Exit Interviews	Indirect	Indirect	Indirect	Indirect
Alumni Survey	Indirect	Indirect	Indirect	Indirect