

# Actuarial Science, MS

## Requirements

The Master of Science in actuarial science requires 36 s.h. of graduate credit. Students must maintain a Graduate College program grade-point average of at least 3.00. The program prepares students for actuarial careers by emphasizing the theory that underlies risk processes and the application of this theory to practical problems of insurance pricing and management. It also helps them learn the material that is tested on professional examinations administered by professional organizations such as the Society of Actuaries and the Casualty Actuarial Society.

Students complete required courses and a final examination. All coursework must be taken on an A-F graded basis.

The MS in actuarial science requires the following coursework.

## Required Courses

Course #	Title	Hours
All of these:		
ACTS:3080	Mathematics of Finance I	3
ACTS:4130	Quantitative Methods for Actuaries	3
ACTS:4150	Fundamentals of Short-Term Actuarial Mathematics	3
ACTS:4180	Life Contingencies I	3
ACTS:4280	Life Contingencies II	3
ACTS:6200/ DATA:6200/ STAT:6200	Predictive Analytics	3
STAT:4560	Statistics for Risk Modeling I	3
STAT:4561	Statistics for Risk Modeling II	3
STAT:5100	Statistical Inference I	3
STAT:5101	Statistical Inference II	3
STAT:6300	Probability and Stochastic Processes I	3
3 s.h. from these:		
ACTS:4160	Topics in Actuarial Science	arr.
ACTS:6160	Topics in Actuarial Science	arr.
ACTS:7730	Advanced Topics in Actuarial Science/Financial Mathematics	arr.
FIN:3300	Corporate Finance	3
Additional course with advisor approval		

## Final Examination

The final examination is offered in the spring semester of the second year of study. Students who do not succeed on their first attempt may retake the exam once.