

## Master of Science with a Minor in Mathematics

This specialized degree program integrates financial theory with applied mathematics and is designed to prepare individuals with backgrounds in mathematics, engineering, or the quantitative sciences for careers managing risky assets and liabilities in today's sophisticated financial markets. The admission and degree requirements for this program differ from those of our basic M.S. program.

The Master of Science program in Finance with a minor in Mathematics is designed as a full-time degree program consisting of 42 semester hours of coursework. Whereas our basic Master of Science program is intended primarily as an alternative to the Master of Business Administration for students with prior study in business administration, this option is intended for individuals with a degree in applied mathematics, engineering, or the quantitative sciences. Prior study of business administration is not required, although we strongly encourage applicants to take coursework in financial accounting, economics and financial management before enrolling. Admission to this program is available only in the Fall semester, and applicants should provide scores for the **GMAT** rather than the Graduate Record Examination (GRE).

### Program of Study for the MS Degree in Finance with a Minor in Mathematics

#### First Semester (Fall)

FIN 7826 Investments Analysis and Portfolio Theory  
EXST 7003 Statistical Inference I  
ECON 7610 Mathematics for Economists  
MATH 4031 Advanced Calculus I

#### Second Semester (Spring)

FIN 7633 Financial Markets  
FIN 7400 Financial Risk Management  
MATH 4024 Mathematical Models (*prereq.: Linear Algebra*)

#### Internship/ Directed study (any term after second semester)

FIN 7900 Individual Study in Finance

#### Third Semester (Fall)

FIN 4850 Financial Derivatives  
MATH 7380 Introduction to Stochastic Processes (*prereq.: consent of dept.*)  
FIN 4830 Analysis of Corporate Financial Statements

#### Fourth Semester (Spring)

FIN 7855 Seminar in Options, Futures, and Derivatives  
MATH 4050 Interest Theory (*prereq.: Probability*)  
MATH 7390 Partial Differential Equations (*prereq.: consent of dept.*)

**Prerequisites**

The following courses or equivalents are recommended prerequisites for admission in the program.

MATH 2085 Linear Algebra

MATH 2065 Ordinary Differential Equations

MATH 3355 Probability

Financial Accounting

**Note:**

Individuals without knowledge of a programming language (preferably C++) will be required to obtain that ability in their first semester.

Students should check with their advisor before registering for any semester.