



### ***Twin Cities Campus***

## **Financial Mathematics M.F.M.**

*School of Mathematics*

**College of Science and Engineering**

Link to a [list of faculty](#) for this program.

### **Contact Information:**

Program in Financial Mathematics, 127 Vincent Hall, 206 Church Street SE, Minneapolis, MN 55455 (612-624-6391; fax: 612-624-6702)

Email: [mfmath@umn.edu](mailto:mfmath@umn.edu)

Website: <http://www.math.umn.edu/finmath/>

- Program Type: Master's
- Requirements for this program are current for Spring 2018
- Length of program in credits: 32
- This program does not require summer semesters for timely completion.
- Degree: Master of Financial Mathematics

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The master of financial mathematics degree program helps students understand the underlying mathematics of quantitative finance. The program offers a range of courses, from theoretical to practical, including a mathematical course on stochastic processes, a practitioner's course offering hands-on application of financial software tools, and a programming course focusing on C# and MATLAB.

Courses are offered in the evenings to accommodate working professionals. The program is designed with the possibility for full-time students to complete all requirements in one year.

## **Program Delivery**

This program is available:

- via classroom (the majority of instruction is face-to-face)

## **Prerequisites for Admission**

A bachelor's degree from an accredited US university or foreign equivalent. The minimum undergraduate GPA for admittance to the program is 3.00.

Other requirements to be completed before admission:

Applicants should have completed college level courses in single variable and multivariable calculus and linear algebra. Background in probability and familiarity with programming language are highly recommended.

### **Special Application Requirements:**

Applications are accepted for fall semester only. The application deadline is February 1. Additional information is available at [http://www.math.umn.edu/finmath/admission\\_requirements/](http://www.math.umn.edu/finmath/admission_requirements/)

Applicants must submit their test score(s) from the following:

- GRE

International applicants must submit score(s) from one of the following tests:

- TOEFL
  - Internet Based - Total Score: 79
  - Internet Based - Writing Score: 21
  - Internet Based - Reading Score: 19

Key to [test abbreviations](#)(GRE, TOEFL).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

## **Program Requirements**



**Plan C:** Plan C requires 32 major credits and up to null credits outside the major. There is no final exam.

This program may be completed with a minor.

Use of 4xxx courses towards program requirements is not permitted.

A minimum GPA of 2.80 is required for students to remain in good standing.

The MFM requires 32 credits, consisting of four year-long course sequences. These sequences may be taken either in parallel or sequentially, following their numerical order, with the exception of FM 5091/5092, which is recommended to be taken as early as possible. In addition to the 32 required credits, students who either do not have a strong mathematics background or who need a refresher may be asked to take FM 5001/5002 - Preparation for Financial Mathematics.

Students may take the optional FM 5990 topics course, which is offered periodically.

#### **Required Courses**

- [FM 5011](#) - Mathematical Background for Finance I (4.0 cr)
- [FM 5012](#) - Mathematical Background for Finance II (4.0 cr)
- [FM 5021](#) - Mathematical Theory Applied to Finance I (4.0 cr)
- [FM 5022](#) - Mathematical Theory Applied to Finance II (4.0 cr)
- [FM 5031](#) - A Practitioner's Course in Finance I (4.0 cr)
- [FM 5032](#) - A Practitioner's Course in Finance II (4.0 cr)
- [FM 5091](#) - Computation, Algorithms, and Coding in Finance I (4.0 cr)
- [FM 5092](#) - Computation, Algorithms, and Coding in Finance II (4.0 cr)

#### **Elective Course**

- [FM 5990](#) - Topics in Financial Mathematics (1.0 - 2.0 cr)