

JOINT BA/MS OR BS/MS IN FINANCIAL MATHEMATICS

Undergraduate students enrolled at the University of Chicago may apply to complete an MS in Financial Mathematics along with a BA or BS degree in a cumulative total of four or five years.

Students interested in pursuing a BX/MS in Financial Mathematics should contact Eliza Higbee at elizahigbee@uchicago.edu.

APPLICATION REQUIREMENTS

All applicants must meet standard prerequisites and admission requirements (<https://finmath.uchicago.edu/admissions/admission-requirements/>) for the Master of Science in Financial Mathematics (MSFM) program, including successful completion of at least multivariable calculus, linear algebra, and probability.

To be considered for admission, students must: (1) complete all general education (core) requirements prior to their expected first quarter in the joint degree program, (2) provide a copy of their Stellic report showing completed and in-progress courses as part of their application materials, and (3) meet with the appropriate contact in the MS program as required per that graduate program.

APPLICATION DEADLINES (ROLLING)

Joint in Four Years

Undergraduate students who will complete all general education requirements and all but three or fewer of their BX requirements by the start of their fourth year can complete the joint BX/MS in Financial Mathematics in four years. On this path, students begin predominantly taking MSFM courses at the start of their fourth year. Applications are due by the end of Week 4 of Spring Quarter of the student's third year, with decisions granted by the end of Week 6 of Spring Quarter.

Joint in Five Years

College students who enter their fourth year with four or more BX requirements remaining may benefit from the five-year option. On this path, students begin predominantly taking MSFM courses in Winter or Spring Quarter of their fourth year. Application deadlines are as follows.

Predominantly taking MSFM courses Winter Quarter of fourth year:

Applications are due by the end of Week 4 of Autumn Quarter of the student's fourth year with decisions granted by Week 6 of Autumn Quarter.

Predominantly taking MSFM courses Spring Quarter of fourth year:

Applications are due by the end of Week 4 of Winter Quarter of the student's fourth year, with decisions granted by Week 6 of Winter Quarter.

BX/MS DEGREE REQUIREMENTS

Students in the joint program are required to successfully complete 1250 units, following the standard curriculum requirements (<https://finmath.uchicago.edu/curriculum/>) for the MSFM, toward which up to 350 units total of MSFM and approved 20000-level courses taken prior to the quarter of matriculation into the BX/MS program may count toward the MSFM elective requirements, following the course guidelines below.

COURSE GUIDELINES

Given the interdisciplinary nature of quantitative finance and the MSFM, there are a variety of College courses that may be counted toward the MSFM. This list is not all-inclusive and is meant to serve as a guide to prospective students, College advisers, and the MSFM program administrator (elizahigbee@uchicago.edu). Additional courses will be considered, with petition to the MSFM program director. Petitions should be coordinated through the MSFM program administrator.

The following courses *automatically* count toward the MSFM:

- CMSC 25300 Mathematical Foundations of Machine Learning
- CMSC 25700 Natural Language Processing
- STAT 22400 Applied Regression Analysis
- STAT 24300 Numerical Linear Algebra
- STAT 24410 Statistical Theory and Methods Ia
- STAT 24510 Statistical Theory and Methods IIa
- STAT 24620 Multivariate Statistical Analysis: Applications and Techniques
- STAT 25300 Introduction to Probability Models
- STAT 26100 Time Dependent Data
- STAT 27400 Nonparametric Inference
- STAT 27850 Multiple Testing, Modern Inference, and Replicability

Additional 20000- and 30000-level+ courses from any department on the topics of machine learning, data science, scientific computing, statistical estimation, numerical methods, and stochastic processes, subject to MSFM program director approval.

COURSE PLANNING

Students accepted into the joint program should closely work with their College advisers and submit their course plans for the pre-matriculation units they plan to count to the MSFM program advisor at least one week prior to the course pre-registration deadline (<https://registrar.uchicago.edu/registration/>) for their matriculating quarter. Students will also map the remaining MSFM units/course plan with the MSFM administrator at that time.

Any changes to the initial course plan must be communicated immediately in writing to the MSFM administrator.

