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 their BA/BS degree in a cumulative total of 4 or 5 years.

If interested in pursuing a BXMS in Financial Mathematics, please contact Eliza Higbee at elizahigbee@uchicago.edu.

APPLICATION REQUIREMENTS

All applicants must meet standard pre-requisites and admission requirements (https://finmath.uchicago.edu/admissions/admission-requirements/) for the MSFM program, including successful completion of at least multivariable calculus, linear algebra, and probability.

APPLICATION DEADLINES (ROLLING)

Joint in 4 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 4th year can complete the joint BX/MSFM in 4 years. On this path, students begin predominantly taking MSFM courses at the start of their 4th year. Applications are due by the end of week 4 of Winter Quarter of the student's 3rd year with decisions granted by the end of week 6 of Winter Quarter.

Joint in 5 Years

College students who enter their 4th year with four or more BX requirements remaining may benefit from the 5th-year option. On this path, students begin predominantly taking MSFM courses in Winter or Spring quarter of their 4th year. Application deadlines are as follows.

- Predominantly taking MSFM courses Winter Quarter of 4th year:
  Applications are due at the beginning of the student's 4th year, by October 14th, with decisions granted by October 24.

- Predominantly taking MSFM courses Spring Quarter of 4th year:
  Applications are due by the end of week 4 of Autumn Quarter of the student's 4th year with decisions granted by week 6 of Autumn Quarter.

BX/MS DEGREE REQUIREMENT

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 300 units of 200-level courses may count towards 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 towards the MSFM. This list is not all-inclusive and is meant to serve as a guide to prospective students, college advisors, 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 towards 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 200 and 300 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 advisors and submit their course plans for the 200-level 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.