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. *BXMS program information is subject to change, and should be confirmed with the BXMS website for the most updated information throughout the year.*

Application Requirements

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

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 Core general education requirements by the end of the Spring of their 3rd year, and all but three or fewer of their BX requirements, including for the overall 4200-unit requirement, by the start of their 4th year can complete the joint BX/MS in 4 years. On this path, students begin predominantly taking MSFM courses at the start of their 4th year.

Undergraduate students who will complete all Core general education requirements and all but three or fewer of their BX requirements by the start of their 4th year, but who wish to take 4 academic quarters, rather than 3, to complete the joint BX/MS degree requirements are eligible for the 5-year Autumn start BXMS option.

Joint in Five Years

Undergraduate students who enter their 4th year with four or more BX requirements remaining, and have all Core general education requirements completed, may benefit from the 5th-year option. On this path, students begin predominantly taking MSFM courses in Autumn, Winter, or Spring quarter of their 4th year. It is expected that all BX requirements are completed by June of the undergraduate student's 4th year.

Application deadlines are as follows.

4-Year Joint Degree

Applications are due by Week 2 of the Spring Quarter of the student's 3rd year with decisions expected by the end of week 6 of Spring Quarter.

5-Year Joint Degree

5-Year Joint Degree Winter Start:
Applications are due by Week 4 of the Autumn Quarter of the student's 4th year with decisions expected by the end of week 6 of Autumn Quarter.

5-Year Joint Degree Spring Start:
Applications are due by Week 4 of the Winter Quarter of the student's 4th year with decisions expected by the end of week 6 of Winter Quarter.

5-Year Joint Degree Autumn Start:
Applications are due by Week 2 of the Spring Quarter of the student's 3rd year with decisions expected by the end of week 6 of Spring 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 300 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 degree.

The following courses *automatically* count toward the MSFM:

BUSN 20820 Financial Econometrics
CMSC 25025 Machine Learning and Large-Scale Data Analysis
CMSC 25300 Mathematical Foundations of Machine Learning
STAT 24310 Numerical Linear Algebra: An Introduction to Computation
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

*A maximum of 100 units from each of BUSN, CMSC, and ECMA/ECON may count towards the MSFM degree. And a maximum of 400 total units from non-FINM courses taken both pre- and post-matriculation in the BXMS program may count towards the MSFM degree.

Additional 30000+ level courses, as well as 20000+ courses crosslisted with a 30000+ level number, from any department on the topics of Machine Learning, Data Science, Scientific Computing, Statistical Estimation, Numerical Methods, and Stochastic Processes, may be considered with special petition to the MSFM program director. Special petitions may be coordinated through Eliza Higbee.

Course Planning

Students accepted into the joint program should closely work with their College advisers and submit their course plans for the 300 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.

OPT Eligibility

4-year BXMS students on an F1 visa must graduate following Spring quarter of their 4th year (and no later) in order to be eligible for OPT upon graduation.

5-year BXMS students on an F1 visa must remain enrolled with the MSFM program through at least Spring quarter of their 5th year (or later) in order to be eligible for OPT upon graduation.

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