Master of Financial Mathematics (MFM) Program
University of Minnesota (UMN)

Students in Undergraduate, Masters and PhD Programs – If you are studying Math, Statistics, Computer Science, Actuarial Science, Engineering, Economics or Physics:

YOU MAY BE A GREAT FIT FOR QUANTITATIVE FINANCE!

QUANTITATIVE FINANCE is a cross-disciplinary field merging the disciplines of Finance, Mathematics, Statistics and Computer Science; it models the inherent uncertainty associated with financial markets. The work involves designing and implementing complex models that allow financial firms to price and trade securities and to manage risk. The largest sectors of the field are: Investment Management, Commercial Banking and Insurance. The understanding, reporting, managing and optimizing of financial risk is a large part of the job. Strong coding skills and the ability to manipulate large data sets are critical skills for the field.

UMN'S MFM PROGRAM GETS YOU PREPARED FOR A JOB IN QUANTITATIVE FINANCE

WHAT MAKES UMN'S MFM GREAT:

Experienced Faculty: Industry quants with PhDs and deep experience in the field and academics from top universities offer a blend of theoretical and practical coursework

All courses taught at night
- Facilitates working student schedules
- Full-time students have time for additional courses, minors, and internships

Great Reputation, Career Opportunities and Alumni Network
- One of only two MFM programs in Upper Midwest
- Active recruiting by local/regional employers in need of local quant talent
- Strong US & international placement (about 75-80+% within 3-6 months of graduation)
- Yearlong Career Development Workshop and 1:1 career advising
- Tight Knit, Very Accessible Local, National and Worldwide Network
- Ranked in top 12-23 programs in North America

Ranked 12   Ranked 20   Ranked 23

Consider applying for the MFM!   To find out more and/or apply, visit our website at https://mcfam.dl.umn.edu/master-financial-mathematics-mfm-program/curriculum or contact us at https://mcfam.dl.umn.edu/

UNIVERSITY OF MINNESOTA
Driven to Discover®

THE MFM ENCOMPASSES THESE AREAS OF STUDY:

Computer Science:
Programming; Data Structures; Algorithms; Databases

Mathematics and Statistics:
Probability and Statistics; Stochastic Calculus; Time Series Analysis, Numerical Analysis
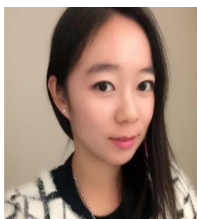
Finance & Trading:
Time Value of Money; Asset Pricing; Risk Management; Portfolio Construction

PREPARATORY DISCILPLINES FOR AN MFM:

Mathematics, Physics, Computer/Data Science, Actuarial Science, Economics, Engineering, Statistics, Finance

GRADUATES OF UMN's MFM FIND JOBS IN: Commercial banks, investment banks, insurance companies, asset managers, hedge funds, fintech/software development, regulatory agencies and trading in these types of positions:

- Quantitative Analyst
- Data Analyst or Data Scientist
- Trader
- Actuary
- Researcher-Fixed Income, Equities
- Government Regulator
- Risk Analyst
- Model Validation Analyst
- Hedging Analyst
- Portfolio Manager
- Investment Analyst
- Quantitative Finance/Software Developer

Justine Yin, Valuation Analyst, Point72, NYC; UMN MFM; B.A., Economics/Finance, Shanghai U
There are many opportunities to learn beyond the coursework. I participated in the Rotman International Trading Competition (RITC). An MFM instructor helped prepare us for the competition by sharing his rich oil trading experience from his years at Cargill. The MFM prepared me for the valuation and pricing work I did at CME Group and the foundation for work I do now at Point72 - researching pricing models and methodology, and providing accurate valuation for my firm's investments in derivatives, PE and Venture.

Will Elliott, Principal, Hedge Development – Allianz Investment Mgt., Mpls., MN UMN MFM; B.S., Electrical & Electronics Engineering, Iowa State University
I discovered the quantitative finance field shortly after graduating from college. I have always been interested in financial markets; the job I am doing now meshes my engineering and MFM background.

Kaka Wang, Fixed Income Sales, Bloomberg, Beijing China; UMN MFM; B.A. Statistics & Math UMN
I support fixed income clients - portfolio managers, analysts and traders - who use the Bloomberg Terminal to monitor the market. I work closely with my clients on training and other customized support. I moved into the fixed income asset class at Bloomberg due to my studies in the MFM. The program prepared me well for the work I am doing now. I learned about fixed income and mortgaged backed securities in the MFM Practitioners' Course and now work with clients in these sub-fields.