

# Quantitative Finance MS

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## FOX SCHOOL OF BUSINESS AND MANAGEMENT

Learn more about the Master of Science in Quantitative Finance.

### About the Program

The Master of Science in Quantitative Finance is a STEM-designated program for students aiming to acquire cutting-edge knowledge and skills in mathematical finance. The curriculum develops expertise in financial modeling, derivative pricing, investment management, global capital markets, and risk management. The coursework integrates mathematical modeling with recent technological advances and familiarizes students with applications of machine learning and Artificial Intelligence in finance. Students gain industry exposure by interacting with senior leaders and experts in finance through guest lectures and visits to financial firms in the Greater Philadelphia area and on Wall Street.

**Time Limit for Degree Completion:** 6 years

**Campus Location:** Main

**Full-Time/Part-Time Status:** The degree program can be completed on a full-time basis in 10 or 22 months or on a part-time basis in two years.

**Affiliation(s):** Research interests of Fox faculty are supported by numerous centers and institutes throughout the Fox School and Temple University.

**Accreditation:** The MS in Financial Analysis is accredited by the Association to Advance Collegiate Schools of Business (AACSB International).

**Job Prospects:** The Fox Center for Student Professional Development (CSPD) provides students with career coaching and professional development resources that support the job search. Graduates are distinctly qualified to contribute in quantitative analysis areas in the financial services industry, including financial modeling, financial risk management, information technology, portfolio management, and securities trading roles.

**Non-Matriculated Student Policy:** Students are not allowed to take classes under non-matriculated status.

**Financing Opportunities:** Citizens and permanent residents of the United States are considered domestic students and are typically eligible for federal student loans and alternative loans through private lenders. The Fox School grants 5% tuition scholarships to alumni who are admitted to the program. Scholarships are limited and available based on merit.

### Admission Requirements and Deadlines

#### Application Deadline:

*Fall:*

- December 15 – Early Admissions Deadline
- March 1 – Scholarship Deadline and International Deadline
- June 30 – Final Deadline

Applications are reviewed as they are received and will be considered after the deadline on a space-available basis.

APPLY ONLINE to this Fox graduate program.

#### Letters of Reference:

*Number Required:* 1

*From Whom:* Academic references and/or professional references from an immediate supervisor, current or past, are accepted.

**Coursework Required for Admission Consideration:** Applicants must demonstrate completion of coursework in Accounting, Finance, Micro/Macroeconomics and Statistics with a grade of "B" or better earned.

**Bachelor's Degree in Discipline/Related Discipline:** The equivalent of a four-year U.S. baccalaureate degree from an accredited university or college is required. For three-year degrees, an evaluation of mark sheets may be required by WES or another NACES organization.

**Statement of Goals:** Essay prompts can be found in the online application portal.

#### Standardized Test Scores:

GRE/GMAT: Scores may be requested based on the applicant's academic and/or professional background. Candidates with an undergraduate GPA below 3.0 are required to submit valid GMAT or GRE test scores. Consult an admissions advisor with any questions.

Applicants who earned their baccalaureate degree from an institution outside of the United States must report scores for standardized test of English that meet the minimums below. Exceptions are made for applicants who have subsequently earned a baccalaureate or masters degree from the approved list of countries provided by the Graduate School.

- TOEFL iBT: 90
- IELTS Academic: 7.0
- Duolingo: 110
- PTE Academic: 68

**Resume:** Current resume or CV is required.

**Interview:** Candidates are invited to interview virtually. Interviews are required on a case-by-case basis.

**Optional Essay:** Prompts for this optional essay can be found in the online application portal.

**Transfer Credit:** Transfer credit is not accepted for the Financial Analysis MS degree.

## Program Requirements

### General Program Requirements:

*Number of Credits Required Beyond the Baccalaureate: 30*

*Required Courses:*<sup>1</sup>

Code	Title	Credit Hours
FIN 5601	Data Intelligence	1
FIN 5602	Corporate Finance	1
FIN 5604	Derivative Markets	1
FIN 5605	Fixed Income	1
FIN 5607	Stochastic Calculus & Finance	1
FIN 5612	Asset Pricing	1.5
FIN 5614	Continuous Time Finance	1.5
FIN 5615	Data Science in Finance	1.5
FIN 5619	Quant Fixed Income	1.5
FIN 5622	Machine Learning in Finance	1.5
FIN 5623	Financial Risk Management	1.5
FIN 5624	Numerical Methods	1.5
FIN 5625	Digital Finance and Technology	1.5
FIN 5627	Financial Econometrics	1.5
FIN 5632	Investment Management	1.5
FIN 5634	Volatility Modeling	1.5
FIN 5635	Generative AI for Finance	1.5
FIN 5636	AI in Portfolio Management	1.5
FIN 5638	Behavioral Finance	1.5
FIN 5639	Credit Risk Modeling	1.5
FIN 5648	Quantitative Portfolios	1.5
FIN 5675	Professional Development	1
<b>Total Credit Hours</b>		<b>30</b>

<sup>1</sup> With approval from the Academic Director, FIN 5683 Special Study in Finance or non-FIN graduate courses may be substituted for any required course.

## 10-Month Full-Time MS

Year 1			
Fall			Credit Hours
Finance Academy (August)			
FIN 5602	Corporate Finance		1
FIN 5604	Derivative Markets		1
FIN 5605	Fixed Income		1
FIN 5607	Stochastic Calculus & Finance		1
Fall I (Aug - Sep)			
FIN 5612	Asset Pricing		1.5
FIN 5614	Continuous Time Finance		1.5
FIN 5619	Quant Fixed Income		1.5
FIN 5627	Financial Econometrics		1.5
FIN 5675	Professional Development		1
Fall II (Oct - Nov)			
FIN 5601	Data Intelligence		1
FIN 5615	Data Science in Finance		1.5
FIN 5623	Financial Risk Management		1.5
FIN 5624	Numerical Methods		1.5
FIN 5625	Digital Finance and Technology		1.5
Credit Hours			18
Spring			
Spring I (Jan - Feb)			
FIN 5622	Machine Learning in Finance		1.5
FIN 5635	Generative AI for Finance		1.5
FIN 5639	Credit Risk Modeling		1.5
FIN 5648	Quantitative Portfolios		1.5
Spring II (Mar - May)			
FIN 5632	Investment Management		1.5
FIN 5634	Volatility Modeling		1.5
FIN 5636	AI in Portfolio Management		1.5
FIN 5638	Behavioral Finance		1.5
Credit Hours			12
Total Credit Hours			30

## 22-Month Full-Time MS <sup>1</sup>

Year 1			
Fall			Credit Hours
Finance Academy (August)			
FIN 5604	Derivative Markets		1
FIN 5607	Stochastic Calculus & Finance		1
Fall I (Aug - Sep)			
FIN 5612	Asset Pricing		1.5
FIN 5614	Continuous Time Finance		1.5
FIN 5675	Professional Development		1
Fall II (Oct - Nov)			
FIN 5615	Data Science in Finance		1.5
FIN 5624	Numerical Methods		1.5
Credit Hours			9
Spring			
Spring I (Jan - Feb)			
FIN 5622	Machine Learning in Finance		1.5

FIN 5639	Credit Risk Modeling	1.5
FIN 5648	Quantitative Portfolios	1.5
Spring II (Mar - May)		
FIN 5632	Investment Management	1.5
FIN 5634	Volatility Modeling	1.5
FIN 5636	AI in Portfolio Management	1.5
<b>Credit Hours</b>		<b>9</b>
<b>Year 2</b>		
<b>Fall</b>		
Finance Academy (August)		
FIN 5602	Corporate Finance	1
FIN 5605	Fixed Income	1
Fall I (Sep - Oct)		
FIN 5601	Data Intelligence	1
FIN 5619	Quant Fixed Income	1.5
FIN 5627	Financial Econometrics	1.5
Fall II (Oct - Nov)		
FIN 5623	Financial Risk Management	1.5
FIN 5625	Digital Finance and Technology	1.5
<b>Credit Hours</b>		<b>9</b>
<b>Spring</b>		
Spring I (Jan - Feb)		
FIN 5635	Generative AI for Finance	1.5
Spring II (Mar - May)		
FIN 5638	Behavioral Finance	1.5
<b>Credit Hours</b>		<b>3</b>
<b>Total Credit Hours</b>		<b>30</b>

<sup>1</sup> This full-time program can be modified for part-time study. Contact the Academic Director for the 22-month part-time schedule for the MS in Quantitative Finance

## Contacts

### Program Web Address:

<https://www.temple.edu/academics/degree-programs/financial-analysis-ms-bu-fian-ms>

### Department Information:

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 1801 Liacouras Walk  
 701 Alter Hall (006-22)  
 Philadelphia, PA 19122  
[foxinfo@temple.edu](mailto:foxinfo@temple.edu)  
 215-204-5890  
 215-204-7678  
 Fax: 215-204-1632

### Submission Address for Application Materials:

<https://apply.temple.edu/FOX/Account/Login>

### Department Contacts:

*Academic Director:*  
 John Soss, CFA, FRM  
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*Specialized Master's Programs Coordinator:*

Rachel Carr

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