

FINANCIAL ANALYTICS

The Master of Science in Financial Analytics prepares students for success in the financial professions by focusing on analytical and algorithmic techniques in financial analysis. The program is open to students with strong quantitative and analytical skills, regardless of their undergraduate major.

Students may enroll on a full- or part-time basis, but course availability is greatest during the fall and winter semesters. The program usually can be completed within three semesters of full-time study. Most students begin the program in Fall. Admission in January and May may also be possible.

Goal 1: Students will demonstrate analytical skills in solving problems.

Objectives: MS Financial Analytics students will have the ability to:

1. Apply Quantitative and Analytical knowledge in financial analysis.
2. Evaluate Banking, Insurance, and Fintech's role in the modern financial system.
3. Apply Python programming to financial data processing and modeling of financial data.
4. Manage corporate and portfolio risk exposures.
5. Value assets and financial securities using quantitative tools.
6. Evaluate managerial decisions concerning financial policy.
7. Apply Quantitative portfolio techniques to construct and manage the client's portfolio.

Goal 2: Students will be persuasive and/or informative communicators.

Objective 1: MS Financial Analytics students will be able to convey finance knowledge through data visualization and effective communication.

MS in Finance Admission Prerequisites

- Mathematics admission prerequisite. Calculus is not required for admission to the MS in Finance. However, applicants who wish to pursue careers in investments or risk management, as well as those who wish to earn Chartered Financial Analysts (CFA) credentials, are strongly recommended to satisfy the Mathematics admission requirement with a college level Calculus course.

MS in Financial Analytics Curriculum

Code	Title	Credit Hours
Foundation Courses ¹		
Required:		0-12
ACC 505	Devel & Interp Financial Info	
BE 530	Econ Analysis: Firm & Consumer	
DS 520	Applied Statistical Modeling ³	
or BA 510	Introduction to Business Analytics	
FIN 531	Fin Fundament & Value Creation	
Core Courses		
Required:		21
BA 530	Programming and Data Structures with Python	
FIN 651	Investment Procedures, Analysis & Management	
FIN 652	Derivatives & Risk Management	
FIN 653	Asset Pricing and Portfolio Management	

FIN 654	Banking, Insurance, and Fintech
FIN 656	Fixed Income Securities
FIN 658	Algorithmic Finance Using Python

Electives

Select one to three courses (3-9 credits). Must include at least **one** 3-9 FIN course:

ACC 608	Financial Statement Analysis
DS 630	Applied Forecasting with Python
DS 633	Machine Learning for Business Intelligence
FIN 581	Advanced Corporate Finance
FIN 650	Corporate Valuation & Strategy
FIN 655	International Financial Mgt
FIN 657	Investment Fund Management
BA 682	Experiential Project ²
BA 690	Graduate Research ²
BA 691	Graduate Seminar ²
BI 500	Business Internship ²

Total Credit Hours **30-36**

¹ Previous equivalent undergraduate or graduate coursework may qualify students to waive any of the foundation courses. Students may complete the MS Financial Analytics in as little as 30 credit hours if they have completed at least two equivalent foundation courses, with a converted grade of "B" or better, before admission. Otherwise, students complete remaining required foundation courses in the program for a total of 36 credit hours.

² A maximum of 3 credit hours on any combination of BA 682, BA 690, BA 691, and BI 500. Requires Department of Accounting & Finance Chair approval.

³ If an admitted student has not already fulfilled this requirement, he/she/they is/are recommended to take DS 520.

Learning Goals

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